

**II International Dental Meeting - UNICAMP
and
XI Dental Meeting of Piracicaba - 2004**

All abstracts appear as submitted by the authors without editing

1. Evaluation of two periodontal techniques to remove impacted subgingival third molar.

CHAVES, A. J. P.*; CHAVES, F. C. A. ; NOGUEIRA, P. S. V.; NASCIMENTO, L. R. ; COSTA, M. E. G.

This study compared the results of two types of flap used to remove impacted lower third molar. Twenty patients were selected and divided into two groups: ten subjects were operated with a distal wedge flap (without relaxant) and the other ten with single flap (with relaxant). Periodontal examinations consisting of measurements of gingival sulcus depth in the faces: disto-buccal, buccal, mesio-buccal, distolingual, lingual, mesio-lingual and distal were done around mandibular second molar adjacent to the tooth extracted, preoperatively and ninety days after removal of impacted molar. Analyses of measurement indicated that there was no significant difference between the two flap techniques; therefore, the choice of flap technique is one operator preference. There was a significant decrease in mean sulcus depth at some measured points for both flap techniques, indicating a healthier condition around mandibular second molars ninety days after the surgical removal of mandibular third molars.

3. Expression of RANK during the alveolar wound healing process. A immunohistochemical study.

CLÁUDIO, C. C.*; ERVOLINO, E.; CASATTI, C.; RIZOLO, R. J. C.; OKAMOTO, T.; OKAMOTO, R.

From all of the proteins involved in the bone tissue dynamics, we may consider Rank as a label of bone remodeling process, since this protein acts in osteoclastogenesis. The alveolar wound healing process involves events like bone neoformation and late bone remodeling and considering this, we performed this study with the aim to evaluate the expression of RANK during the cronoology of this process that is already well described in literature. For this study, we used 24 rats, that had the right upper incisive extracted. The animals were perfused with 4% paraformaldehyde at 7, 14, 21 and 28 pos operative days and the sections of the pieces were obtained in cryostat. The immunohistochemistry reactions were performed using Rank antibody and dyaminobenzidine as a cromogen. The results showed the expression of RANK in the cells present in the bone formed during the alveolar wound healing process. We also observed greater expression of this protein at 7 and 14 pos operative days. We can conclude from our results, that Rank is expressed in the bone cells during the alveolar bone healing and that there are changes in the intensity of the label in the different periods that were studied. Supported by FAPESP and CAPES

5. Osseous repair after periapical surgery: a 13-month long radiograph accompaniment.

JACOB, V. P.*; MESSORA, M. R.; FURLANETO, F. A. C.; SILVA, J. R.; MARIANO, R. C.; NAGATA, M. J. H.

Periapical surgery is a complicated proceeding wich is subordinated to some technique, anatomic and biologic interferences. To minimize the factors that make difficult this kind of oral surgery, calcium hydroxide is considered an ideal material to decrease root resorption, playing bactericidal action on the residual microorganisms and stimulating the hard tissue formation. We describe here a case of periapical surgery where was applied the Ca(OH)₂ on the end resectioned root. R.A.S., 24 years old, appeared at EFOA/Ceufe surgery clinic with a periapical lesion wich involved elements 21 and 22, after passing for repeated endodontic treatments. Her mainly complaint was a fistula in that area, with suppuration and pain by pression. Physique and radiographic examination were maden and thus a periapical surgery was indicated. Elements 21 and 22 were submitted to an apicectomy and calcium hydroxide was applied. The patient was attended with radiograph examinations along 13 months and we observed a great radiolocence decrease with a satisfactory osseous repair. The technique was successful since we couldn't note any clinical lesion either.

2. Necrotizing fasciitis of odontogenic origin

GOMES, P. P.*; LUNA, A. H. B.; ALBERGARIA-BARBOSA, J. R.; PASSERI, L. A.

The management of odontogenic infections forms a significant component of the workload of oral and maxillofacial surgeons. These infections often arise as well-localized lesions, which respond favorably to appropriate management. However, delayed or inappropriate treatment may result in progression to a life-threatening illness. The patients usually have sought treatment from general dental or medical practitioners prior to presentation. Unfortunately, common features of the treatment administered by them include reluctance to establish and maintain surgical drainage and an over-reliance upon antimicrobials as the primary mode of treatment. It is important that treatment methods with proven efficacy be adopted when treating these potentially serious conditions. Much of the reluctance to manage infections surgically can be attributed to a lack of appreciation of the surgical anatomy of maxillofacial infections, and uncertainty regarding the actual techniques of establishing drainage. One potential risk is the necrotizing fasciitis (NF) that was first described in 1871. In 1952, the term was coined for the necrotizing soft tissue infections in which the fascia is invariably involved. Necrotizing fasciitis is characterized by its devastating and rapid-progressing course. The purpose of this presentation is to review the literature and the cases treated on our service, and describe a NF case.

4. Plan of treatment for case of intrusion of incisors permanent superior central

MURAKAWA, A. C.*; SBRANA, M. C.; SONODA, C. K.; POI, W. R.; SOTTOVIA, A. D.

The dental intrusion is a traumatism form characterized by the displacement of the tooth for the interior of the alveolus. The diagnosis can be obtained by the unevenness of the incisal board between the committed tooth and the adjacent tooth, besides the radiographic exam. It's considered by provoking considerable damages to the periodontal ligament and alveolar bone. In that case, the correct conduction of the treatment becomes important to favor the repair. This paper has as objective the report of a clinical case, in which after the occurrence of dental traumatism, the patient observed the absence of the elements 11 and 21. To the clinical and radiographic exam the total intrusion of both teeth was verified. The plan of instituted treatment was the dental extruding, endodontic therapy, systemic antibioticoterapy and restoration of the fractured area. The repositioning of the teeth was gotten after 3 months with the use of movable apparel. The endodontic therapy consisted of changes of hydroxide of calcium for the control of the radicular reabsorption. The fractured area was recuperated with system it attacks acid and composed resin and previously, there was the need of a surgery for correction of the gingival contour. The result has been showing favorable and has demonstrated the importance of the correct conduction of the treatment plan, considering the severity of the trauma.

6. Removal of miniplates used in the treatment of oral and maxillofacial fractures: retrospective analysis of 5 years

CORTEZ, A. L. V.*; BRASILEIRO, B. F.; PASSERI, L. A.; MORAES, M.

The use of miniplates and screws with internal rigid fixation for the treatment of oral and maxillofacial fractures allows function during osseous healing period, better oral hygiene, comfort and early return to diary activities. To study the reasons for miniplates removal in all of the patients who were attended by the Oral and Maxillofacial Surgeons from FOP-Unicamp. Retrospective analysis of the clinical charts of the patients from april, 1999, to march, 2004. The data reviewed related to gender, age, indication for using fixation, the region, number of plates, necessity of removal and time until removal procedure. From 1892 charts of patients, there were 386 patients (335 men and 52 women) included. There were 549 maxillofacial fractures with 850 miniplates used for surgical treatment. From the total, 51 (6% of all miniplates) were removed (27 men and 7 women – ratio 3.85:1, respectively). The miniplates removal occurred because of symptomatic (85.29%) and non-symptomatic reasons (14.71%). Miniplates removal may be necessary in short or long time, therefore the need for careful post-operative follow-ups are indispensable.

7. Midface advancement: report of a case

SERRA, E. C. S.*; BARBEIRO, R. H.; ASSIS, A. F.; LANDGRAF, H.; KLUPPEL, L.; SCARTEZINI, G. R.; DANTAS, J. F.

Surgical treatment of patients with dentofacial deformities must take in account data obtained from facial, cephalometric and dental casts analysis. When maxillary repositioning is necessary, Lefort I osteotomy is the most used procedure, offering predictive and stable results. However, depending on specific characteristics of the deformity, others procedures are necessary in order to obtain an adequate cosmetic result. For those patients who present true midface hypoplasia association of others osteotomies of the fixed facial skeleton or the implantation of alloplastic material are reliable options. The authors' purpose is to report a case in which the treatment of midface hypoplasia was performed by means of Lefort III modified osteotomy, Lefort I osteotomy and Bilateral Sagittal Split Ramus Osteotomy.

9. Surgically-assisted rapid maxillary expansion under local or general anesthesia

ASPRINO, L.*; SVERZUT, A. T.; PASSERI, L. A.; MORAES, M.

This study presents surgically-assisted rapid palatal expansion (SARPE) performed on 19 adult patients employing local or general anesthesia. The indications for SARPE include any case where a transverse maxillary deficiency of more than 5mm in a skeletally mature patient exists. The decision to perform surgery under local or general anesthesia was made considering the severity of the transverse discrepancy, the patient's comfort and economic issues. The sample comprised 12 patients who underwent SARPE under local anesthesia and 7 patients who underwent SARPE under general anesthesia. Procedures under general and local anesthesia showed to be safe, with short surgical time and with satisfactory results. The purpose of the present study was not to evaluate long-term stability, but to present the best indications for the surgical-anesthetic technique in the dental-skeletal maxillo-mandibular transverse discrepancies.

11. Effect of different irrigant solutions on bond strength of a self etching adhesive system to pulp chamber dentin

SANTOS, J. N.*; ZAIA, A. A.; GOMES, B. P. F. A.; SOUZA-FILHO, F. J.; FERRAZ, C. C. R.

The aim of this study is to evaluate in vitro the influence of endodontic irrigants on the bond strength of a self etching adhesive system to pulp chamber dentin. Twenty five bovine incisors were cut to expose the pulp chamber. The pulp was extirpated and the root canal orifice sealed with temporary restorative material (Cotosol-Coltène). The specimens were divided into five experimental groups: G1: 0.9% sodium chlorite, G2: 5.25% sodium hypochlorite, G3: 5.25% sodium hypochlorite and 17% EDTA, G4: 2% chlorhexidine gluconate solution, G5: 2% chlorhexidine gluconate in a gel base. Each irrigant solution remained 30 minutes in contact with pulp chamber dentin. After irrigation, teeth were washed with 0.9% sodium chlorite and dried for 5 seconds. A self etching adhesive system, Clearfil SE Bond (Kuraray), was applied according to manufacturer's instructions, followed by Z250 resin composite, which was applied in incremental layers. The microtensile bond test was performed after 24h storage in 37°C distilled water. Bond strength values obtained in Mpa (G1: 14.78 ± 7.32, G2: 16.05 ± 8.69, G3: 14.40 ± 7.74, G4: 19.63 ± 5.75, G5: 20.17 ± 8.49) were analysed and no statistical significant differences were found (p>0.05). It could be concluded that, in the conditions of this experiment, endodontic irrigation with different solutions does not affect bond strength to pulp chamber dentin. Support: CAPES/FAEP/FAPESP.

8. Clinical evaluation of the effectivity of the heterogenous organic bovine grafts associated with the bovine embryo bone morphogenetic protein in maxillary sinus augmentation: histologic analysis

SERRA E SILVA, F. M.; PEREIRA, C. L.; MOREIRA, R. W. F.; MAZZONETTO, R.

The sinus lift technique using autogenous bone promotes adequate bone formation for the insertion of implants in the posterior maxilla, but the necessity of a donor site causes more discomfort and morbidity to the patient. Several bone substitutes have been studied with the purpose of avoiding the necessity for a harvesting site. The aim of the present study was to evaluate the clinical and histological behavior of bovine grafts associated with the bone morphogenetic protein (Gen-Ox® + Gen-Pro®), when compared with autogenous grafts. Bilateral maxillary sinus lift was performed in 10 non-smoking, systemically healthy patients, selecting one side as test and the other as control. After a period of 5 to 11 months, implants were placed according to the reverse planning and a biopsy of the lateral wall of the sinus was performed. The osseous specimens were processed and analyzed in an optical microscope. The histological analysis of the test group showed bone formation with similar aspect to the autogenous graft. Clinically, it was observed that the control group presented more bone formation and better implant stability. Thus, the association of heterogenous bovine graft and bone morphogenetic protein presents similar histological aspects to the autogenous bone graft, but promoted worse implant primary stability.

10. Evaluation of chemical composition, radiopacity and apical and coronal leakage of three brands of gutta-percha cones.

CORTEZ, D. G. N.*; MANIGLIA-FERREIRA, C.; GOMES, B. P. F. A.; FERRAZ, C. C. R.; SOUZA-FILHO, F. J.; ZAIA, A. A.

This study evaluated the relationship between chemical composition of three commercial brands of gutta-percha cones and the apical and coronal leakage and radiopacity. Chemical components of Dentsply 0.06 (06), Dentsply TP (TP) and Konne (K) cones were separated and quantified. Forty nine roots were prepared and divided in 3 groups according to the gutta-percha cone. Two groups were used as controls. The filling was made by continuous wave of condensation technique with Pulp Canal Sealer. The backfilling was accomplished by the continuous wave of condensation or with gutta-condensers. To analyse the radiopacity, specimens were filled only with cones, without cement. After the ink action and clearing, the leakage length were measured with Imagelab software. Digital x-rays images of the cones were taken before and after the filling with Digora system. The percentages of gutta-percha in each cones were: 21.6%-TP; 17.6%-K and 16.6%-06. Apical leakage averages (mm) were: 1.39-TP; 1.55-06 and 1.66-K. Coronal leakage averages were: 2.28-TP; 2.78-06 and 3.52-K. Leakage averages did not demonstrate statistical difference. Radiopacity averages (grey scale) of the cones were: 241.03-06; 204.08-K and 177.46-TP. Radiopacity results demonstrated statistical difference among the cones. It was not found, however, relationship between chemical composition and apical or coronal leakage. CNPq 304282/2003-0.

12. Association of sodium perborate + chlorhexidine gel 2% during the walking bleach technique - a case report

OLIVEIRA, D. P.*; FERRAZ, C. C. R.; ZAIA A. A., GOMES, B. P. F. A.; SOUZA-FILHO, F. J.

Discoloration of anterior teeth is an esthetic problem that requires effective treatment. The walking bleach technique using temporary materials provides the teeth with inadequate sealing which is susceptible to coronal microleakage. Being thus, it would be interesting that the bleaching agent presented a good antimicrobial activity in order to prevent such infiltration. The clinical case that will be showed demonstrate the success of the association: sodium perborate + chlorhexidine gel 2% during the walking bleach technique.

13. Antimicrobial effect in vitro of isolated compounds of *Mikania glomerata* some oral pathogens.

F. SILVA, P. L. ROSALEN, R. YATSUDA, J. A. CURY, V. G. REHDER, H. KOO, R. GONÇALVES, R. CECANHO, M. G. FUJITA.

The aim of the present study was to analyze in vitro the properties of isolated identified compounds of *Mikania glomerata* on tests of minimal inhibitory concentration (MIC), minimal bactericidal concentration (MBC) and adherence on glass surface assay (Adh). The compounds tested was espatulenol, caurenol and grandfloric, caurenol, diterpenic and cupressenic acids (concentration of 80 to 1,25 mg/mL) and 80% ethanol, v/v was used as control. The tests was realized against *Streptococcus mutans* Ingbritt 1600, *S. mutans* UA 159, *S. sobrinus* 6715 and 2 "cepas clinical", *Enterococcus faecalis* ATCC 29212 e *Actinomyces naeslundii* ATCC 19246. The tubes were incubated at 10% CO₂, 37 °C for 24h (MIC and MBC), 18h for Adh and placed at an angle of 30°. Was realized 6 copies to all tests. The grandfloric acid, espatulenol, e caurenol don't showed antimicrobial activity on the CIM, CBM and Adh tests, being effective the cupressenic, caurenol and diterpenic acids, in low valours. The cupressenic and caurenol acids was more effective then others, with low valours of CIM and CBM (2,5 µg/ml and 5 µg/ml). The Adh of all microorganisms was inhibited in low valours sub-CIM, cupressenic and caurenol acids 2,5 µg/ml. So we conclude that the compounds showed activity on bacterians grow and adherence of microorganisms tested, suggesting that may have some cariostatic potential.

15. The influence of the seasonal effect on the antimicrobial potential of Brazilian propolis type 12, during 6 months.

CASTRO, M. L.; DUARTE, S.; KOO, H.; BOWEN, W. H.; CURY, J. A.; IKEGAKI, M.; ROSALEN, P. L.; ALENCAR, S. M.

Propolis, a beehive product, has shown anti-caries properties. It is known that the biodiversity of different geographic regions, as well as their temperature zones, may be responsible for the chemical differences in the constituents and the biological effect of different propolis. This suggests that the chemical composition of propolis is dependent on its geographic origin and the seasonal effect. The main of this study was to evaluate the influence of the seasonal effect on ethanolic extracts of Brazilian propolis (EEP) type 12, analyzed monthly in the period of August to January. The antimicrobial properties were evaluated by minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC) on *Streptococcus mutans* Ingbritt 1600. The total flavonoids concentration was also evaluated. Triplicates were made for each month. The MIC results were of 50-100 mg/mL for the months of August and September. For the other months, the results were of 100-200 mg/mL. The MBC for August was of 400 mg/mL, and for the other months it was of 800 mg/mL. The results obtained in August and September are lower those found in literature. In September, the flavonoids concentration was of 5.6 mg of flavonoids/mL, which was the highest concentration found. The results suggest that the period at the end of the winter increases the concentration of the chemical compounds related to the anti-caries effect of Brazilian propolis type 12.

17. Analysis of radiographical errors performed by dental students. six years of evaluation.

GOMES, C. G.*; BARÃO, V. A. R.; PADILHA, A. C. S.; SIMONATO, L. E.; SALZEDAS, L. M. P.

The radiographic techniques is fundamental to obtain an image of high quality. The practice during the graduation will reduce costs and will previne an exposure of the patients. The aim of this study was evaluate the frequency and kind of errors during the learning process of the periapical technique of bisectrix, and the performance of the dental students in the course of year. 12.230 radiographies were analyzed considering processing and technical mistakes, and values were analysed statistically using the analyses of variance. The most commons errors were the vertical angle (32,12%) and positioning of the film (25,62%) and the lower frequencies were: folded films, double exposition and shaken radiography (0,79%; 0,64% and 1,41% respectively). The authors also observed that these rates were relatively constant in the course of time. It concludes that the high frequency of errors in the vertical angle did not improve with the year, suggesting a certain lack of help from the teacher, which happens naturally in the process. That is, the hands on tutor in the beginning of the process avoid errors, considering also that not all the expositions are shown. In the end of the process, the help is only solicited by the student, when is necessary to judge the work. Therefore, it is necessary more studies under controlled conditions for the confirmation of such results, and possible changes of strategies in the teaching procedure.

14. Anti-inflammatory and analgesic properties of *Pterodon pubescens* Benth in dentistry

SPINDOLA, H. M.*; PINHEIRO, M. L. P.; BRANCO, F. P.; FOGLIO, M. A.

Phytotherapy use natural substances with therapeutic focus and was the first pharmacotherapy method. It is an alternative treatment and isn't a medical specialty. Few studies have shown the relationship between phytotherapy and Dentistry. *Pterodon pubescens* Benth (Sucupira) a plant found in some Brazilian states (Minas Gerais, São Paulo, Mato Grosso do Sul e Goiás) is used in medical treatments as anti-inflammatory, tonic and depurative. Oil extracted of *Pterodon pubescens* Benth seeds has anti-inflammatory and analgesic effects. The aim of this study is to explain about the utility of *Pterodon pubescens* Benth in Dentistry.

16. Agensis of permanent canines. report of cases.

PADILHA, A. C. S.*; GOMES, C. G.; BARÃO, V. A. R.; SIMONATO, L. E.; SALZEDAS, L. M. P.

Dental agensis is a hypoplastic dental anomaly characterized by the total absence of one or more teeth, confirmed by radiographic examination. The etiology of the hypodontia is probably of genetic origin, though it may be a result of the natural filogenetic evolution of the dental arch. The teeth most often missing are the terminal teeth of each serie. In Brazil, the literature presents controversy in relation to the frequency of agensis. The canine agensis is rare and its diagnosis must be confirmed by radiographic and clinical examination. The purpose of this study is to report two cases of these agensis and to point out the importance of an early diagnosis. The two female patients with canine agensis and prolonged retention of deciduo canine, had this anomaly unknown. In the first case, a 12 year-old patient, was referred orthodontic evaluation. In the second case, a 18 year-old patient, needed an evaluation of the third molars. The early detection of canine agensis is very important, since the migration of the neighboring teeth should promote an occlusion disturbance and a desfavorable esthetics. It is important to consider that maxillary canines have the longest period of development and are the teeth most often impacted. Therefore, the clinical and radiographic evaluation of this teeth requires the special attention of the dentist.

18. Effect of fluoridated toothpaste in dental biofilm composition formed in situ.

ARTHUR, R. A.*; TABCHOURY, C. P. M.; DEL BEL CURY, A. A.; CURY, J. A.

Fluoridated toothpaste is the main factor in caries decrease. The composition of dental biofilm formed in its presence is not well known, and this is the aim of this study. This was a crossed study and occurred in two stages with 14 days each one. The volunteers wore an intraoral appliance which had 4 sound human dental enamel blocks and dropped, 8 times a day, 20% sucrose solution (S) in two blocks and destilated water (dW) in the two others. No-fluoridated toothpaste (nFt) and fluoridated toothpaste (Ft) were used. The biofilm formed was colleted, weighed (W) and analysed about of calcium (Ca), fluoride (F), inorganic phosphorus (Pi) and insoluble extracellular polysaccharide (IP) concentrations. The results (mean ± sd) of W(mg), F(mg/g), Ca, Pi e IP(mg/mg) to nFt are: (dW)-W: 1,9±1,5a; (S)-W: 4,6±3,3b; Ft: (dW)-W: 2,3±2,5a; (S)-W: 6,4±5,6b; nFt: (dW)-F: 74,4±63,5a; (S)-F: 12,2±14,4b; Ft: (dW)-F: 65,6,8±626,5c; (S)-F: 182,6±346,6d; nFt: (dW)-Ca: 17,6±10,1a; (S)-Ca: 5,6±6,3b; Ft: (dW)-Ca: 25,2±18,2a; (S)-Ca: 6,3±10,3b; nFt: (dW)-Pi: 9,0±5,1a; (S)-Pi: 3,2±2,8b; Ft: (dW)-Pi: 11,2±8,7a; (S)-Pi: 3,8±4,0b; nFt: (dW)-IP: 37,5±14,4a; (S)-IP: 160,1±152,3b; Ft: (dW)-IP: 51,5±53,9a; (S)-IP: 196,0±160,9b. Results followed by distinct letters are statistically different (p<0,001). The results suggest that the fluoridated toothpaste increase the F concentration in biofilm, with no alterations in the concentration of the other inorganic and organic components.

19. Influence of the period between application and activation of dentin adhesive on resin cement bond strength to dentin

MENEZES, M. S.*; SILVA, G. R.; FONSECA, R. B.; SOARES, C. J.

The aim of this study was to evaluate the effect of the period taken between dentin adhesive application and its polymerization on the bond strength of resin cement to dentin. One hundred and eighty bovine incisive teeth were embedded in a polystyrene resin and the buccal surface was ground with 100, 320 and 600-grit silicon carbide paper to form a flat superficial dentin surface. A 3mm dentin area was isolated and received the following treatments: Single Bond (SB); Excite (Ex); Prime Bond 2.1 (PB) and One-up Bond F (OB) being polymerized according to the following periods: 0, 10 and 20 seconds after application, resulting on 12 groups. Cylinders of indirect composite resin were adhesively fixed with resinous cement. The bond strength was accessed through a shear bond test on a mechanical testing machine at a crosshead speed of 0.5 mm/min. Data were submitted to two-way ANOVA (4x3) following Tukey test ($p < 0.05$). The results (MPa) were: SB0s-18.9(3.2); SB10s-15.5(5.8); SB20s-11.3(3.2); Ex0s-17.1(5.7); Ex10s-14.4(4.3); Ex20s-2.5(1.5); PB0s-11.7(2.2); PB10s-9.6(2.3); PB20s-7.1(2.0); OB0s-14.7(3.0); OB10s-13.5(3.4); OB20s-11.5(3.1). There was a clearly relationship between modes of fracture and SEM observations. The period between time of the application significantly affects bond strength of resin cement to dentin. The adhesive polymerization before the period of 20 seconds negatively affects the adhesion to dentin.

21. Scanning Electron Microscopic analysis of the number and diameter of dentinal tubules according dentin depth and bovine age.

SILVA, G. R.*; SIMAMOTO JÚNIOR, P. C., FONSECA, R. B., SOARES, C. J.

The purpose of this study was to evaluate by SEM the number and diameter of crown dentinal tubules according the age 20(G1),30(G2),38(G3) and 48months (G4) and depth of dentine, in bovine teeth. 40 bovine incisors had been divided in 4 groups (n=10). 2 samples (2x2mm) was extracted from buccal surface. The dentine had exposed below DEJ represented the superficial dentine (SD) and the middle layer (MD) had been represented by midway thorough SD and deep dentine (pulp chamber). For SEM analysis, the specimens had been immersed in EDTA 10%, NaOCl 5%, etanol (35-100%) and were sputter-coated with gold. Photomicrographs made at x1000 and x5000 magnification, verifying amount of dentinal tubules (mm²) and tubule diameter (µm). The results was analyzed by factorial statistics (4x2) verifying difference for the factors age and depth ($p < 0.05$). According to the amount of dentinal tubules, G1: MD(17886±5256), SD (12932±1383); G2:MD(17092±3630), SD(12908±960); G3: MD(14472±2071), SD(10758±1058); G4: MD(14280±2232), SD(8892±954) and the mean of diameter tubule was, G1:MD(3,20±0,44), SD (2,45±0,54); G2: MD(3,14±0,23), SD(2,25±0,28); G3:MD(3,06±0,27), SD(2,01±0,40); G4:MD(2,69±0,23), SD(1,63±0,22). In bovine teeth, with increasing the dentine depth was observed increasing of number and diameter of the tubules and still with the increase of the bovine age had reduction in the diameter and number of the dentinal tubules.

23. Evaluation of microtensile bond strength of self-etching adhesive systems to intact and ground enamel

DI FRANCESCANTONIO, M.*; OLIVEIRA, M. T.; AMBROSANO, G. M. B.; GIANNINI, M.

This study evaluated the microtensile bond strength of five self-etching adhesive systems and two total etching adhesive systems to intact (I) and ground (G) enamel. Enamel fragments of human third molars were used; half of them were ground with 600-grit SiC paper. The I and G enamel samples were randomly divided into seven groups (n=6): G1: Single Bond (3M ESPE), G2: Prime & Bond 2.1 (Dentsply), G3: Xeno (Dentsply), G4: Tyrian (Bisco), G5: Opti Bond Solo Plus (Kerr), G6: Unifil Bond (GC Corp.), G7:One-up Bond (Tokuyama). After adhesive system application, a composite block (Clearfil APX - Kuraray) was built and serial sections were made in the occlusal-cervical direction. Furthermore, these slabs were trimmed to an hour-glass shape, obtaining a cross sectional area of approximately 0,8mm². The specimens were tested in tension (0,5mm/min - Instron 4411) and results were analyzed with Kruskal-Wallis and Dunn tests ($p < 0.05$). There was a difference between surfaces and adhesive systems (MPa):G1- 17,73Bab (G), 22,43Aa (I); G2-24,30Aa (G), 23,70Aa (I); G3-21,47Aab (G), 24,96Aa (I); G4-20,85Aab (G), 21,13Aa (I); G5-12,83Ab (G), 0,00Bb (I); G6-17,18Aab (G), 15,96Aab; G7-16,44Aab (G), 5,85Bb (I). The results suggest that surface condition and the kind of the adhesive system can influence the microtensile bond strength to enamel.

20. Influence of the endodontic treatment and composite resin restoration on the fracture resistance of maxillary premolar

SOARES, P. V.*; QUEIROZ, E. C., CAMPOS, R.E., SOARES, C. J.

The aim of this study was to evaluate the effect of the endodontic treatment and the composite resin restoration in the fracture resistance of the premolar human MOD prepared, endodontic treatment and composite resin restoration. 50 intact premolars had been selected, enclosed in polystyrene resin reproducing the periodontal ligament and then divided aleatoriamente in 5 different groups (n=10): G1-intact teeth; G2- MOD prepared ; G3-MOD + composite resin; G4-MOD + endodontic treatment; G5-MOD + endodontic treatment and composite resin. The specimens had been submitted the axial load of compression in machine, with speed of 0,5 mm/minute until the fracture. The fracture types had been analyzed in 5 levels. The data had been submitted to the analysis of variance and test of Tukey ($p < 0.05$), after that the group of intact teeth was restrained, and then factorial analysis (2x2)teste of Tukey was used. The results had been (Kgf) G1:83,6±25,4a; G3:82,1±40,9a; G5:64,5±18,1ab; G2:52,7±20,2b and G4:40,2±14,2b. Inside of the limitations of this study, can be concluded that the composite resin obtains to strengthen the tooth resistance with socket MOD or that they had suffered endodontic treatment. The endodontic treatment makes it difficult the recovery of the posterior tooth resistance.

22. Effect of surface treatments and bonding agents on the bond strength of repair composite resin

LIMA, A. F.*; CAVALCANTI, A. N., PERIS, A. R., MITSUI, F. H. O., MARCHI, G. M.

The aim of this study was to evaluate the effect of surface treatments and bonding agents on the bond strength of repaired composite resin. 120 samples of the composite were divided into 12 groups (n=10) according with surface treatments [nothing (N), air abraded with Al₂O₃ (AA) and roughened with diamond stone (D)] and bonding agent [phosphoric acid etched before Single Bond (SB), phosphoric acid etched before Clearfil SE Bond (C1), Clearfil SE Bond (C2)]. The groups were: G1. N+SB; G2. N+C1; G3. N+C2; G4. AA + SB; G5. AA + SB; G6. AA+C1; G7. AA+C2; G8. D; G9. D+SB; G10. D+C1; G11. D+C2 and G12. intact composite specimens, were used to determine the fracture strength of intact, resin composite. The samples were then sliced on 3, and in the interfacial adhesive of each slice was marked a constriction delimiting approx. 1mm² area. The microtensile bond strength test was realized using an Universal Testing Machine (Instron) at a crosshead speed of 0,5mm/min. The bond strength scores were statistically analyzed using one-way ANOVA/Tukey test ($p < 0.05$) revealed on this results (MPa): G1. 34,09±7,3 (ab); G2. 34,98±9,87 (ab); G3. 38,10±11,38 (ab); G4. 34,36±10,7 (ab); G5. 38,04±6,88 (ab); G6. 38,97±7,99(ab); G7. 39,89±4,44(ab); G8. 31,04±5,95(b); G9. 33,12±5,49(b); G10. 33,67±5,15 (ab); G11. 40,37±7,19(ab); G12. 45,31±6,34(a). Could be concluded that the surface treatments and adhesive systems presents the same conduct.

24. Preventive and rehabilitating aspects in the treatment of porting trauma

MONTEIRO, A. G. V.*; SANTOS FILHO, P. C. F.; SIMAMOTO JÚNIOR, P. C.; SOARES, C. J.

The dental trauma is presented currently enters the diseases of oral health with prevalence in the age of 6-17 years. Being one of the contributing etiologies factors, the practical one of "contact's sports", each stimulated time more in this age. In this context, it's important to point out the psychological and emotional aspects of the trauma victims; mainly practicing of sports in level of competition, influencing in negative way the results of the athlete. Therefore, it is of basic importance the spreading and implementation of the use of mouthguards in the safe practical of sports that offer risks to the maintenance of the buccal health. This work has for objective to present the clinical case of youthful athlete of basketball, 16 years, which suffered accession from teeth 11 and 21 in consequence of not intentional shock. Later, 7 days after the dental reimplant, was done the endodontic treatment and was confectioned a personalized mouthguard. For the conclusion of the integral and integrated treatment, was given emphasis to the restoring aesthetic procedure, that consisted of the reconstruction of broken tooth 21 with a direct restoration with composite resin. Thus, it is aurgeon dentist responsibility the awareness of parents, trainers , athletes and sports associations about the risks of the participation of physical activities without protection and this form stimulate and demand the use of security devices.

25. Iatrogenesis in dentistry and its resolutions

DURÃO, V. C. A. *, RAHAL, V.; SIMONATO, L. E.; MESTRENER, S. R.; BRISO, A. L. F.

Success in restorative treatment and the patient's complete satisfaction depends on the execution and the correct maintenance of restorative procedures. Looking for aesthetics is an actual reality, where facings, laminates, closing diastemas and conical teeth has been a common practice; where the patient searches for the best teeth's shape, color and positioning. However, if some Dentistry basic principles involving periodontal issues weren't considerate, such as cervical limit and restoration contours, an inflammation in supporting structures may occurs. The marginal excess in restorations, lack of proximal contact, and bad occlusion facilitate the bacterial plaque to be formed, promoting periodontal changes. These qualitative changes in the bacterial plaque may manifest in all periodontal structures, taking to the periodontal disease; promoting a disbalance between the bacterial action and host response. In this study, we will emphasize all kinds of factors related to biological knowledge and restorative techniques, integrating the Aesthetics and Restorative Dentistry with Periodontology, using a multi-discipline planning to maximize the dentofacial aesthetics.

27. Effect of a second adhesive application on microtensile bond strength of bonding systems.

SILVA, A. L. F.*LIMA, D. A. N. L., BUENO, V. C. P. S., DIAS, C. T. S., PAULILLO, L. A. M. S.

This study evaluated the effect of an additional adhesive coat on the microtensile bond strength (mTBS). Thirty-five human third molars were flattened to exposed dentin surface. Teeth were randomly designed to seven experimental groups, according to the bonding systems and number of coats: G1 - Single Bond (SB); G2 - 2 coats of SB; G3 - Scotchbond Multi-purpose (SM) bonding on SB; G4 - Clearfil SE Bond (CB); G5 - 2 coats of CB; G6 - Adper Prompt (AP) e G7 - 2 coats of AP. After application of the adhesives, composite crowns of 5 mm high were built up. The restorations were sectioned in order to obtain 0.9 x 0.9 mm beams, which were tested in tension (0.5 mm/min). The failure mode and adhesive thickness were evaluated under SEM. Results were analyzed by ANOVA and Tukey's test (p<0.05): G3: 36,36 (9,13) a, G1: 29,76 (9,42)b, G4: 24,86 (9,83) bc, G5: 23,93 (5,82) c, G2 21,70 (6,60) c, G7: 13,83 (5,13) d, G6 11,98 (2,70) d. The SM application results in the highest mTBS and adhesive thickness. The application of an additional adhesive coat didn't affect mTBS for CB and AP. However, the additional coat of SB reduced mTBS.

29. Teacher's activity as an oral health agent.

FRANCHIN V.*, FLÓRIO F. M.

This study aimed to assess the adequacy of qualification of education area professionals as an oral health agent. A questionnaire was filled out by 339 students enrolled in the Normal Superior Course of the Hermínio Ometto University Center in Araras. It was found that 84.3% of the volunteers are professionally active in teaching and that 98.2% reported having information with respect to factors responsible for caries disease, among whom, 66% considered themselves to be satisfactorily informed about it. The absence of cleaning (93.5%) and exaggerated sugar consumption (49%) were the factors most cited with reference to the etiology of caries disease and the source of information was the dental surgeon (50%), followed by the school (27.1%), the family (20.9%), the media (15.6%), participation in lectures (16%) and daily life (12.4%). The teacher's activity as an agent for multiplying oral health was considered important by 99.7% of the volunteers. Among the difficulties mentioned as preventing the teacher's activity from being adequate, was the lack of support from the children's families (39.5%), followed by the lack of didactic material (16.3%) and the lack of dentistry human resources at the school (12.7%). It was concluded that the teacher's activity as an oral health agent requires training on the part of professionals in the area and the support of higher competencies.

26. Effect of new dentin cavity preparation technologies on microtensile bond strength to dentin using different adhesive systems

OLIVEIRA, M. T.; AMBROSANO, G. M. B.; GIANNINI, M.

This study evaluated the effect of dentin cavity preparation technologies on microtensile bond strength (μ TBS) to dentin, using self-etching adhesive systems (Clearfil SE Bond - Kuraray (SE) / Unifil - GC Corp (UN)) and a total etch adhesive system (Single Bond - 3M ESPE (SB)). Third molars with occlusal dentin flattened were treated with air abrasion (AA), CVD-diamond sonoabrasion (SA) and 600-grit SiC paper (SiC). Nine experimental groups were established (n=4): G1-SE-AA, G2-SE-SA, G3-SE-SiC, G4-UN-AA, G5-UN-SA, G6-UN-SiC, G7-SB-AA, G8-SB-SA, G9-SB-SiC. Following surface treatments, adhesive systems were applied according to manufacturer's instructions and 5mm blocks high were built with Clearfil AP-X (Kuraray) composite. Teeth were stored for 24h in distilled water and trimmed to beams shape of approximately 0.8mm². The beams were tested in tension (0.5mm/min - Instron 4411) and results were analyzed with ANOVA and Tukey's Test (p<0.05). It was found an interaction between adhesive systems and surface treatments (MPa): G1:25.04±4.64Aa, G2:14.11±5.48Ba, G3:13.20±6.82Bb, G4:32.31±9.20Aa, G5:17.48±6.45Ba, G6:11.24±4.62Bb, G7: 29.50±5.80Aa, G8: 21.92±4.94Aa, G9: 22.76±6.45Aa. (Capital letter - Adhesive / Lower case letter - Technology). The results showed that cavity preparation technologies can influence self-etching adhesive systems μ TBS to dentin.

28. Promoter polymorphisms in MMP-1 gene and increased risk of early osseointegrated implant failure.

LEITE, M. F. F.*; SANTOS, M. C. L. G.; LINE, S. R. P.

Despite the long-term success of osseointegrated implants, failure remains inevitable. The cluster phenomenon—multiple implant failures in the same subject—supports the evidence that individual characteristics play an important role in the early failure process. However, little is known about the influence of genetic susceptibility on osseointegration. Metalloproteases (MMPs) are responsible for the extracellular matrix metabolism, which is closely related to tissue degradation and bone resorption. Gene polymorphisms are variations within the range of what is considered biologically normal and can be associated with several diseases. Polymorphisms -1607 and -519 in the MMP-1 gene show a haplotype association. The 2G allele at -1607 is more often found with the A allele at -519. These alleles were observed to increase transcriptional activity of the MMP-1, increasing the tissue degradation. Therefore, the aim of the present study was to investigate the influence of these polymorphisms, separate and in haplotype combination, on early implant failure, using 30 patients who had suffered early implant failures and 30 patients with healthy implants. Genomic DNA from oral mucosa was amplified by PCR and analyzed by RFLP. Monte Carlo simulations were used to assess the frequencies of these polymorphisms. Haplotype combinations were verified using the software ARLEQUIN. The results of the present study indicate that polymorphisms of MMP-1 are associated with early osseointegrated implant failure.

30. Oral health in an agricultural area of Tanquinho, Piracicaba - São Paulo

TOLEDO, T. B.*; SOUSA, M. L. R.

The Brazilian agricultural region needs studies about the occurrence of the problems of oral health, that which makes possible direct the health programs in the field of dentistry. The objective of this work was to verify the main problems observed in an agricultural area of Tanquinho, Piracicaba-SP. Thus, an epidemiologic survey was realized with 129 students from 6 to 14 years old, following the recommendations proposals for the World-wide Organization of Saúde (OMS), from October to November, 2003 and from April to May of 2004. For the caries evaluation ceod for deciduous dentition was used. The indices and CPOD for permanent dentition and evaluation of periodontal condition was used CPI index. The examinations had been carried out only by a one dentist calibrated, with intraexaminator agreement above of 89,28%, confirming the trustworthiness of the data. The results of ceo and CPO gotten for the ages of 6 and 12 years had been 1,5 and 2,93 respectively. Of the 129 examined 10,04% had presented free of caries. CPI index indicated the presence of bleeding in 41,1% of the examined ones. The present study verified that, although an agricultural region, the value of CPOD was similar to the one carried through national survey at the same time (2,78), however ceod was lower, interpreting this data with caution due to the reduced amostral size, disclosing an inadequate oral hygiene of great part of the evaluated students, being necessary a directed attention to this group.

31. Breast-feeding promotion activities: the role of the dentist in a multi-disciplinary team.

QUINTEIRO, G.*; INOCÊNCIO, L. B.; CARRASCOZA, K. C.; SCARPARI, C. E. O.; TOMITA, L. M.; POSSOBON, R. F.; MORAES, A. B. A.

The Exclusive Breast-feeding promotion group is an important component of the activities developed by the Research and Dental Treatment Center for Special Patients, that deals with the management of mothers' behavior concerning early weaning practices. The present study evaluated 40 mothers that participated of the "Exclusive Breast-feeding promotion group" during the first 6 months of their baby's life. During eight meetings, mothers received theoretical information and training of practical breast-feeding behaviors with the purpose to induce exclusive breast-feeding during six months. Applying questionnaires and observation procedures were carried out in each meeting. Results showed that, after completing six months, 88% of the children was receiving breast-feeding, and the index of exclusive breast-feeding was 32,5%. Rational use of pacifier and bottle-feeding was observed for 30% and 43% of the children, respectively. Considering the relevant literature, which indicates exclusive breast-feeding measures below 50%, it may be concluded that the "exclusive breast-feeding actions" taken over in our program represents a successful intervention program to prevent the development of cranio-facial alterations in children. It is also recommended that dental professional must be more intensively involved in program that deals with breast-feeding and its consequences to oral health.

33. The biopsychosocial aspects influence in breastfeeding maintenance.

ARRIGONI, M.*; BRASILEIRO, A. A.; TOMITA, L. M.; CARRASCOZA, K. C.; SCARPARI, C. E. O.; POSSOBON, R. F.; MORAES, A. B. A.

The explanations offered by mothers to maintain breastfeeding for a period longer than 1 year (children's age) was the objective of this work. The research involved 40 mothers and their children that were participants of the Research and Dental Treatment Center for Special Patients (Cepae/FOP/UNICAMP). Mothers were asked about the reasons that could explain breastfeeding longer than 1 year. Results indicated that "pleasure" was the response gives by 40% of the mothers. Most of them (82%) reported that their children didn't have a fixed breastfeeding schedule, and it was difficult for them to establish limits and pre-established weaning times. It was also reported that 70% of the children slept with their mothers, and 92% did not attend to a nursing school. Data also showed that 97,5% of the mothers stayed at home with their children, what suggest nearness increases the probability of longer breastfeeding. Results of the present study offer valuable information to health professionals in their efforts of orientation of mothers related to breastfeeding habits.

35. Uncooperative behavior during child dental treatment.

CAMPOS, E.B.V.*; ROLIM, G.S.; CARRASCOZA, K.C.; SCARPARI, C.E.O.; TOMITA, L.M.; POSSOBON, R.F.; MORAES, A.B.A.

The present research analyses dental treatment of 16 children that presented a previous history of uncooperative dental treatment behaviors. Subjects were divided in two groups: (G1 and G2). During base line sessions: first 5 sessions for G1 and 3 sessions for G2, dentists were not allowed to use physical restriction. This intervention could be used after base line sessions. Guidance, reinforcement of cooperative behaviors and persuasion were ineffective strategies to evoke collaboration during base line sessions: frequency and intensity of uncooperative behavior increased during these sessions and it is possible to suppose that avoidance behaviors were reinforced. The comparison of behavioral results between G1 and G2 indicates a greater maintenance of uncooperative behaviors of G1 subjects what suggests that for these subjects avoidance behaviors were more intensively reinforced. It is possible to conclude that dentist's training in behavior analysis may be a useful tool to improve professional skills on behavior management.

32. Pregnants orientation for baby oral health maintenance.

INOCÊNCIO, L. B.; QUINTEIRO, G.; PEREIRA, F. R.; BRIOSCHI, V.; TOMITA, L. M.; CARRASCOZA, K. C.; SCARPARI, C. E. O.; POSSOBON, R. F.; MORAES, A. B. A.

Compliance to dentist's orientation about breastfeeding and oral cleaning offered to pregnant during an Orientation Program was evaluated with 82 pregnant during the year of 2003. Results showed that, after a formal lecture, a decrease in the number of pregnant who intended offer baby bottle and pacifiers to their children, (73% and 68% respectively). Considering the periods of mother's absence in day care activities, 81% of the mother reported their adherence to offer their children natural milk cups previously collected and decrease in the number of mothers who intended to give cow milk bottles. It was also observed that 66% of the pregnant accepted the orientation of cleaning their babies mouth soon after birth. As a conclusion, the present investigation suggest that a Pregnant Orientation Program may be an efficient way to change mother's perception about the oral habits consequences, importance of breastfeeding and the early mother clearing procedures. Pregnancy period may be considered, as an adequate time to offer baby care information once mothers seem to be quite receptive. So, health professional should be prepared to use instruction procedures that may enhance mother's compliance during pregnancy.

34. Pediatric dentist actuation in breastfeeding promotion and maintenance.

BRASILEIRO, A. A.*; ARRIGONI, M.; SCARPARI, C. E. O.; TOMITA, L. M.; CARRASCOZA, K. C.; POSSOBON, R. F.; MORAES, A. B. A.

The identification of biopsychosocial variables related to early weaning was the main objective of a research program conducted in the Research and Dental Treatment Center for special patients (Cepae/FOP/UNICAMP). With this purpose, 40 mothers that interrupted breastfeeding of their children before 6 months were submitted to a formal interview (that lasted around 40 minutes), and after that to the Stress Symptom Inventory. Results indicated that for 65% of the mothers early weaning occurred around babies third month of life, and for 17,7% before babies completed 2 months. The most frequent cause for early weaning, as related by mothers, was the lack of milk (45%). Data obtained through SSI application revealed that 62% of the mothers presented stress symptoms. Significant results of stress symptoms occur for mothers that interrupted breastfeeding when children were about to complete 3 months. Mothers that reported lack of milk as a cause for early weaning showed stress in 48% of the cases. Results suggest that dentists must be aware of the main causes of early weaning. In this way he may be able to offer instruction, instrumental and effective support to help mothers to maintain babies' breastfeeding, which will promote general and oral health.

36. Mandibular fracture, lingual and inferior alveolar nerve injury related to third molar removal and legal consequences

PEREIRA, S.D.R.*; AMBROSANO, G.M.B.; FRANCESQUINI JR, L.; COSTA, L.R.S.; DARUGE JR, E.; DARUGE, E.; SILVA, R.F.; DE LA CRUZ, B. V. M.

The number of litigious actions in Oral and Maxillo Facial Surgery has been increased for the past years world wide. Among the most performed surgeries, third molar extraction is one of the most common. Mandibular fracture, inferior alveolar nerve injury and lingual nerve injury may happen as consequence of inferior third molar extraction and represent great source of lawsuit in oral surgery. The Informed Consent must be given to the patient before the procedure. After the Ethical Committee approval, a survey with 200 questionnaires was applied to Dental Surgeons in Vitoria and Vila Velha Cities in Espirito Santo State in Brazil to study these three inferior third molar related accidents. The results showed no case of mandibular fracture and found 8% of inferior alveolar nerve injury and also 8% of lingual nerve injury. The most common reasons for inferior third molar surgery were: lack of space (42%), pericoronitis (13%), caries (11%), orthodontics (10%), periodontics (8%), pain (6%), pathologies (3%) and second molar resorption (1%). Concerning Informed Consent, most of the participants explained risks and made post operative orientation orally which may raise doubts, leading to legal argumentation. 75% of Dental Surgeons classified Mandibular fracture after inferior third molar surgery as a professional malpractice while there were different opinions about inferior alveolar and lingual nerve injuries. The research concluded that even with third molar surgery related morbidity, the informed consent is not properly done and asymptomatic third molar is being extracted.

37. Changes in patient facial by means of a progenic appliance in the correction of incipient class III malocclusion: a case-report

FELIPE, W. F.*; BELTRÃO, R. T. S.; FRETAS, M. R.; HENRIQUES, J. F. C.; JANSON, G.; ALMEIDA, R. R.

The aim of this study was to reemphasize the necessity of early treatment in the incipient Class III malocclusion. This type is characterized by incisal edge-to-edge position, causing anterior slide of the mandible, determining functional anterior cross-bite. When manipulated to Maximal Intercuspal Position, patients present Class III malocclusion and anterior cross-bite, whereas in Centric Relation Class I relationship and incisal edge-to-edge position are seen. The chief complaint is a concave facial profile and not the dental malocclusion itself. In this case-report, the patient was 5 years and 6 months-old, had a mixed-dentition stage, incipient Class III, cross-bite, and horizontal growth pattern. The Eschler appliance was used during a 4-month period to correct Class III, reestablishing proper condyle placement, dental inclinations, and changing the patient facial profile.

39. Facials and dentals features evidenced in logical sequence from images in the orthodontics treatment.

PINHEIRO, C. N.*; REIS, M. J.; OLIVEIRA JR, M. A.; DAHMEN, L.

The diagnosis orthodontics make use of various tool for preparation of treatment plan such as, clinic and radiographics exam, models analysis, and the photographs. If had the large evolution in the everybody this tool of the diagnosis, the images and, more specifically the digital photographics, reached large evolution. Until short time, the basic photographics in the patient were achieved in conventional camera, provides the slid elaborate or photographies in paper. Any difficulties were finded with this improvement in the quality and store, etc. With the advent in the digital camera, this obstacle were to a great extent overcome and some advantages added this method photographics with reduced time and price, provide a better diagnosis. Like this, a suggest the new photographic protocol for the orthodontics plan, more full, concise, safe, and more in keeping with the norms in the legislate presents.

41. Maxillary sinus floor augmentation for osseointegrated implant placement

LUNA, A. H. B.*; GOMES, P. P.; MAZZONETTO, R.; ALBERGARIA-BARBOSA, J. R.

The bone quality and quantity at the host site are important variables affecting the success of osseointegration. Although these factors vary throughout the jaws and between individuals, the posterior maxilla is known to have poor-quality bone and reduced volume because of atrophy and pneumatization of the maxillary sinus following loss of dentition. These factors have been reflected in long-term success rates for maxillary implants, and may prevent the placement of implants of optimal length. In 1980, Boyne and James advocated placement of autogenous marrow and cancellous bone from the iliac crest into the pneumatized maxillary sinus to increase the amount of bone available for implant placement. Since then, numerous surgical techniques and graft materials have been suggested for this procedure. The aim of this study is to review the main indications, surgical techniques and limitations of this procedure, and present a series of sinus lift clinical cases performed by the Oral and Maxillofacial Surgery Area, Piracicaba Dental School, Unicamp.

38. The orthognathic surgery integrated with the orthodontic treatment at the reestablishment of neuromuscular, bone and dental systems - a case report.

QUEIROZ, V. S.; NOUER, D. F.; PEREIRA NETO, J. S.; LUNARDI, N.; VIOTTI, A. O.; SARDINHA, S. C. S.

Oral and maxillofacial surgery and orthodontics must be integrated with diagnosis, planning and treatment of the neuromuscular, bone, dental and functional stomatognathic system. The authors' main purpose was to emphasize the role of the orthodontic technique (directional forces technique - Tweed Merrifield) to reestablish these systems before and after the surgery. Lateral telerradiographs, plaster models and intra and extra oral photographs, with surgical-orthodontic protocol, were used to evaluated skeletal Classe III malocclusion. The treatment was divided in 4 periods: T1, T2, T3 and T4. The first period (T1) was characterized by pre-surgical dental movements, followed by orthognathic surgery (T2), with mandibular set-back by sagittal split osteotomy and reduction genioplasty. In the third period the conventional orthodontic therapy was done with postural and functional reestablishment of tongue and orbicularis. At the end of the orthodontic treatment (T4) an attempt was made to restore the dentition harmony with the tegumentary systems and bone using directional forces. The authors concluded that besides the expected surgical results, this biological orthodontics guidelines contributed with the stomatognathic system balance and harmony through a improvement in facial index from 0.59 mm to 0.73 mm; reduction in upper lips measurement from 15 mm to 14 mm and increase of the total chin from 14 mm to 17 mm, besides the reduction of FMA angle from 39° to 31° with satisfactory results to stability especially achieved through the use of anticlockwise directional forces.

40. A new mechanical option for atresia dentoalveolar treatment.

DAHMEN, L.*; REIS, M. J.; OLIVEIRA JR, M. A.; PINHEIRO, C. N.

The orthodontic starts to being exercised in your essence when we make diagnosis. As soon as diagnostic and treatment plan is elaborated, we seize upon the better orthodontic mechanics. If we are in front of an severe crowding teeth for example, and the clinical case in your facial aspect does not allow make extractions, we can elaborate therapies which involve expansionists procedures. The functional orthopedic literature report us several appliance with this purpose presenting advantages and disadvantages. Larger disadvantage with this method is the indiscipline frequently present from few or not use of these removable devices during the treatment. Surpassing this obstacle we are presenting in this study the AEFI (Lower-splitting fixed appliance). This is an appliance which obeys the biological principles of traditional mechanical orthopedic. Its great differential is that does not need the patient's collaboration. It is adapted by lingual, it is extremely rigid and does not modify the intercanine distance. This appliance is used aware of the widespread literary sampling in the that concerns "the instability of the expansionists corrections" in the post-treatment.

42. Growth factors, leucocytes and platelets quantizing in the blood clot and PRP clot.

GUIDI, R.*; BARBOSA, D. Z.; LOYOLA, A. M.; MARQUES, L. A. P.; MARQUEZ, I. M.; RODRIGUES JR., V.

PRP, a therapeutic modality rich in growth factors has been used separately or in conjunction with bone grafts. The objective of its use is to accelerate and enhance bone repair in areas reconstructed for dental implantation. Platelet derived growth factor (PDGF) and transforming growth factor (TGF - β) have stood out as starters in the knowledge of these growth factors concentration in the PRP. This study assessed the amount of platelets and leucocytes in the PRP obtained from a simplified method, and its correlation with PDGF - AB and TGF - β 1 concentrations in total blood and PRP. Also, the effectiveness of the method used to obtain and concentrate these growth factors was evaluated. Eighty samples from 20 volunteers were collected. Forty samples were used for each of the growth factors PDGF and TGF - β 1. To measure the concentration of these growth factors immunoassays (ELISA), according to the sandwich technique (R&D systems), were used. The results showed a significant difference ($p < 0,05$) in the concentration was significantly higher for TGF - β 1 in the total blood clot when compared to the PRP clot. However, this increase in concentration of growth factors had no statistically significant correlation with the increased amount of platelets and leucocytes in the PRP. These data suggest the presence of a source of growth factors in the PRP, other than platelets and leucocytes.

43. Maxillary sinus reconstruction using extraorally harvested autogenous bone

PEREIRA, C.L.*; SERRA E SILVA, F.M.; MORAES, M.; MOREIRA, R.W.M.

Poor quality and quantity of bone, associated with anatomic variations, are frequent findings in the posterior maxilla due to the pneumatization of the maxillary sinus after posterior teeth loss. During the planning of dental implant rehabilitation, these factors can limit the placement of implants of ideal dimension. Sinus reconstruction has been advocated as an attempt to increase the amount of bone available for implant placement. Several surgical techniques and graft materials have been developed with different indications, according to the amount and quality of bone needed. Autogenous bone is considered to be the best alternative for bone grafting and different intraoral and extraoral donor sites are available. The iliac crest, the tibia and the calvaria are the most frequent extraoral harvesting locations for maxillary sinus reconstruction, providing greater amounts of bone when compared with intraoral bone sources. Several clinical investigations have evaluated the outcomes of extraoral harvesting obtaining satisfactory results. Our aim is to review the main indications, surgical techniques and limitations of the most widely used extraoral bone harvesting sites and present a series of maxillary sinus reconstruction clinical cases using extraorally harvested autogenous bone, performed by the Oral and Maxillofacial Surgery area, Piracicaba Dental School, Unicamp.

45. Conservative protocol in the treatment of odontogenic keratocyst. Report for 27 cases and literature review

MAURETTE P. E.; DE OLIVEIRA R. G.; JACKS J; MAZZONETTO R.; DE MORAES M

The odontogenic keratocyst (OKC) is a cystic lesion of odontogenic origin, derived from the enamel organ or from the dental lamina, of aggressive behavior, with a potential of larger growth than of the other odontogenic cysts that could reach a great size and producing massive bone destruction. This cyst presents a similar behavior to a benign neoplasia with high recurrence rates (25 to the 60%), which differs significantly of the other cystic lesions of odontogenic origin. For that reason, it is considered by some authors, the need of the aggressive treatment. The purpose of our study was to analyze the patients records that presented OKC assisted by the Area of Oral and Maxillofacial Surgery of FOP-Unicamp, among the years 1995 and 2003, in relation to the epidemiology of the lesion, clinical and histological characteristics and effectiveness of the treatment protocol utilized, in comparison with the different reports published in the literature.

47. Influence of hidrophobic adhesive application associated to self-etching system in fixing of indirect restoratives

CASTRO, C. G.*; PEREIRA, J. C., SANTOS FILHO, P. C. F.; MENEZES, M. S., CARLO, H. L., SOARES, C. J.

The aim of this study was to evaluate the bond strength of adhesive indirect restorations fixed with self-etching system under influence of association with hidrophobic adhesive and to compare it with one bottle adhesive. Thirty bovine incisors were extracted and parted in the cementum-enamel junction. Superficial dentin was exposed and the teeth were divided into 3 groups (n=10): G1:One Up Bond (OB); G2:OB + hidrophobic adhesive application Scotchbond; G3:Single Bond. Resin composite blocks were fixed with resin cement (RelyX). The specimens were serial cutted with adhesive area of $\pm 1,0\text{mm}^2$ in 3 regions: enamel (E), peripheral dentine (DP) and central dentine (DC). The samples were tested at 0,5mm/min in a microtensile testing machine. After fracture, they were examined under SEM (Scanning Electron Microscopy). The data were analyzed by one-way ANOVA, followed by Tukey test ($p < 0,05$). The results were: G1/E: $15,47 \pm 3,55\text{b}$; G1/DP: $22,66 \pm 7,65\text{a}$; G1/DC: $19,41 \pm 9,44\text{a}$; G2/E: $15,95 \pm 5,85\text{b}$; G2/DP: $19,89 \pm 6,88\text{a}$; G2/DC: $15,31 \pm 4,90\text{a}$; G3/E: $23,18 \pm 7,32\text{a}$; G3/DP: $20,43 \pm 8,19\text{a}$; G3/DC: $19,06 \pm 8,70\text{a}$. It may be concluded that: the hidrophobic adhesive application didn't increase the bond strength of self etching adhesive system; the action of self etching adhesive in enamel was lower to dentine; the one bottle adhesive demonstrated greater adhesion to enamel and similar values with self etching system in dentine.

44. Chemical and microstructural analysis of the implant / abutment interface of four endosseous implant systems

RABELO, G.*; BASTOS, E.G.; MAURETTE, P.E.; ALBERGARIA-BARBOSA, J.R.

The aim of the present study was to evaluate through optical microscopy, scanning electron microscopy and energy dispersive spectroscopy the chemical and metallographic composition, the superficial topography and the implant / abutment interface of four dental implant systems available in Brazil: Implamed, Master Screw, Titanium Fix and INP, divided in Groups 1, 2, 3 and 4. The results obtained from the chemical analysis showed that all groups had a typical structure of Degree 1 commercially pure titanium. The metallographic analysis showed that the four groups presented an alfa + beta structure, and that group 1 presented the smallest grain size. The results from the scanning electron microscopy (SEM) showed better surface finishing in groups 1 and 2, and groups 3 and 4 showed sharper and more irregular threads, respectively. The analysis using SEM associated with energy dispersive spectroscopy showed the presence of surface contaminants in all samples. The analysis of the implant / abutment interface varied according to the implant system but all groups presented good adaptation. In conclusion, all groups presented good results, especially groups 1 and 2 in the metallographic evaluation of grain size and finishing of the threads.

46. Patophysiology of pain orofacial

BIANCHI, FJ*.

Pain is an experience lived deeply for almost all the human beings. The critical analysis of the painful, many times independently of complementary exams, can determine the diagnosis and establish therapeutical an adequate one, aiming at its control. The IASP, defines it as: an awkward, decurrent sensorial and emotional experience of tissues injuries. Many times manifest in the absence of tissues aggressions, as in peripheral neuropathy or central and some psychopathological situations. Significant pain intense or drawn out cause anatomical, neurochemistry modifications of the peripheral nervous ways and the nuclei and treatments implied in the sensitive processing. Evidences demonstrate that these are correlated persistent pain. So that if it understands the diagnosis and the treatment of Pain Orofacial, one becomes necessary to know the peripheral mechanisms and involved central offices in its production and maintenance, as well as the mechanisms that enhance the different types of hiperalgesy. It has many gaps to be cured for the understanding of pain, but the agreement on the mechanisms central and peripheral is, to each day, extending itself. One gives credit that about 32% of the population it would be subjects to some type of DTM and that 70% of the cases would be followed by pain. Thus, this work has for objectives to revise the involved mechanisms in orofacial pain, and to facilitate the agreement of the painful processes

48. Evaluation of Simptomatology Evolution in Patients with Temporomandibular Disorders, submitted to Occlusal Devices Therapy, by means of experimental combine scale

ZANATTA, G.*; SILVA, W. A. B.; SILVA, F. A.; ANSELMO, S. M.; RAMOS, G. G.

The methods to quantify and evaluate the evolution of dolorous simptomatology in patients with temporomandibular disorders, during therapeutics periods are one the most difficulty for the dentists. The aim of this work was to evaluate by means of an experimental combine scale, the evolution of dolorous simptomatology in patients with signs and symptoms of temporomandibular disorders, edentulous on the maxilla and with Kennedy's prosthetic space class I and II in mandible, treated with occlusal plane appliance, before, during and after 150 days of the beginning of therapy. Sixteen patients were selected by history chart with age between 33 and 67 years old, with chronic voluntary simptomatology and reduced occlusion vertical dimension. The patients were submitted to the treatment with occlusal planes appliance with biweekly consultations for a period of 150 days. During this consultations, the patients records theirs impression about the evolution of dolorous simptomatology in an experimental combine scale, visual analogical and numerical. The obtained results were grouped in tables and submitted to Friedman's test ($p < 0,05$). These results showed significatives differences between the obtained values in each consultations realized, demonstrating a reduction in the recorded values during the treatment period. In this manner, we concluded that the indicated therapy were effective and the experimental scale showed efficient in records the evolution of the symptoms detected initially.

49. Evaluation of tooth movement during conventional processing of maxillary and mandibular complete dentures

MACHADO, C.*; RIZZATTI-BARBOSA, C. M.; SILVA-CONCÍLIO, L. R.; JOIA, F. A.; MELOTO, C. B.; RIBEIRO, M. C.; SILVA, L. H. G.; SOUSA, R. L. S.

The aim of this study was to evaluate tooth movement in maxillary and mandibular complete dentures processed by water bath in conventional flasks. A pair of complete dentures was fabricated. Metallic spheres were used to standardize base thickness (2mm) and artificial denture teeth positioned at an articulator. From this pair of dentures, two stone molds were made to standardize sample reproducibility. Denture teeth were placed in the stone molds and ten pairs of dentures waxed. Eight reference points were determined and a traveling microscope was used to measure tooth distances before (t0) and after (t1) processing. Samples were invested with all-gypsum technique in metallic flasks. After acrylic resin packing, flasks were processed by water bath (73±1°C, for 9 hours). Samples were deflasked and tooth distances measured. Data were submitted to paired t-test to compare tooth distances for (t0) and (t1), and to Pearson's Correlation and impaired t-test to correlate and compare maxillary and mandibular dentures. No statistical significant difference (p<.05) was found between (t0) and (t1). In general, there was no correlation between maxillary and mandibular tooth movement. Although there were no significant changes in tooth movement, the lack of correlation between maxillary and mandibular tooth movement may prejudice occlusal adjustments during prosthesis insertion.

51. Diagnosis and treatment for patient presenting muscular and articular TDM; a clinical study report

KABBACH, W.*; OLIVA, E. A.; BATISTA, A. U. D.; RABELO, J. G. R.; COELHO, T. M. K.; ALENCAR JUNIOR, F. G. P.

The temporomandibular disorders are a group of disorders which can affect all TMJs and/or the masticatory and cranium-cervical musculature, affecting the stomatognathic system as a whole. The diagnosis of those changes is strongly based on the evaluation of the historical of the patient and on his/her physical examination, supplemented by complementary exams. We will present a clinical case in which the patient C.R.F.S., female, 41, went to the Orofacial Pain Clinic UNESP- FOAr, complaining about pains in her nape and in her bilateral TMJs. Such pains have started 13 years ago, with depressive and tense characteristics, a 6 days a week frequency at least, intensity from 7 to 8 and an almost constant duration, worsen by the function. After the anamnesis and the physical examination, it was possible to diagnosis the presence of an articular (synovitis) and muscular (myofascial pain) change. The treatment involved the control of all contributing factors, physiotherapy, pharmacotherapy and the construction of the anterior repositioning plate. We will present the clinical sequence of the diagnosis and the treatment of the patient, which was effective in the symptomatology control and in the reestablishment of the life quality of the patient.

53. Evaluation of two methods to determinig centric relation in angle class in patients

RAMOS, G. G.*; SILVA, L. L. B.; SILVA, W. A. B.; SILVA, F. A.; CABRAL, C. W. L. F.; ZANATA G.

The purpose of this study was investigate variations in condilar positions using two different methods of determining centric relation: bilateral mandibular manipulation advocated by DAWSON since 1974 and the arch tracing for the mandible movements in horizontal plane. This arch was denominate arch gothic in 1910 by Gysi. The sample consisted of 20 adults, 10 females and 10 males. On the basis of the analysis of the Wilkocson test (sampling error of 5%), it can be concluded that high coefficient of variation showed the most variation of bilateral mandibular manipulation method when compared with Gysi gothic arch method.

50. Bruxism during sleep and alertness: literature review

DINIZ, D. G.*; OLIVA, E. A.; BATISTA, A. U. D.; COELHO, T. M. K.; RIBEIRO, J. G. R.; COUTINHO, M. R.

Parafunctional habits can be summarized as habits associated to the increase of the normal muscular function, also known as muscular hyperactivity. They are recognized as one of the factors which can be involved in the multifactorial etiology of TMDs. Among those habits, the bruxism presents itself as one of the most prevalent. Bruxism can be defined as the habit of compressing, clenching or creaking teeth, during non-functional movements from the masticatory system, thus being considered a parafunctional mandibular behavior. This habit can occur in alertness or during the sleep, producing noises or not. Due to its high prevalence and damage potential, it is necessary to be aware of the characteristics of this habit. We will present a literature review concerning this parafunction, emphasizing its etiology, prevalence, clinical features, diagnosis and treatment. It can be concluded that the bruxism has a high prevalence, its diagnosis is difficult to be done, it can produce deleterious effect to teeth, periodontium, musculature and TMJ, has a multifactorial etiology and there is not a specific treatment for this change so far. Thus, it is important that dentists make the correct diagnosis of the presence of this parafunction, and consequently, take all appropriate attitudes in order to prevent the occurences of damages to the patient.

52. Comparison of strain distribution on two different kind of implants connection.

BERNARDES, S. R., ARAÚJO, C. A., FERNANDES NETO, A. J., NEVES, F. D.

For years osseointegrated implants have been showing higher rates of success. But the original implants, with external hexagon on its platform, have shown marginal bone loss of 0.9mm in the first year and 0.1mm in the following years. A possible reason for this is a strain concentration around the implant neck as a result of an overload in the prosthesis leading to bone microfractures. In an attempt to decrease the strain concentration around the implants, companies put implants with different connections to the abutment on the market. In this research two types of implant connections were evaluated: internal hexagon and external hexagon. The implants were manufactured without threads and abutments of the same size; these were different only in the kind of the connection. Implants and abutments were bonded forming two groups with the same external design, each group was fixed in photoelastic blocks of the same size. Over each group was applied two different kinds of load: firstly axial to the implant, and secondly non axial. In these models the quantity and quality of the strain gradient over the implant body was evaluated in 61 points. There were found little differences in results between these models evaluated, in values of the highest shear strain.

54. Oral rehabilitation with immediate osseointegrated implant activation: a case report.

GRANDIZOLI, D. K.*; AYUB, E. A.; VALLE, A. L.; BONFANTE, G.; PEGORARO, L. F.; NISHIDA, C. L.

Longitudinal studies have confirmed the findings of Branemark et al. (1977), who stated that in order to obtain bone tissue on the implant interface it is necessary to keep the implants submerged in bone tissue (two-stage surgical protocol). This protocol provides the relationship of osseointegration with an atraumatic surgery and absence of loads on the implants for a minimum period of 3 to 6 months, which will minimize the occurrence of infections and epithelial proliferation along the implant surface. Many studies corroborating the successful results of osseointegration aimed at decreasing the time for implant loading, as determined by the original protocol. One of the first studies that used prosthetic rehabilitation concomitant with fixations reported the first description of immediate loading, with the activation of three implants and maintenance of some submerged in bone tissue as a safety and control measure. This approach lead to a high success rate (80%) compared to submerged implants (100%). Recent publications show similar success rates when comparing immediate activated implants with non-activated ones. This work demonstrates by means of a case report the steps involved in the planning, and fixations and prostheses installation.

55. The periodontal plastic microsurgery in restoration of abfraction lesions

COLOMBINI, B. L.*; ISHIKIRIAMA, S. K.

Abfraction lesions are commonly found at the cervical region of teeth with occlusal discrepancies, specially on the buccal surface. The treatment should include the resolution of the occlusal problems and then the restoration of the lesion, which can be done with composite resins and compomers. When associated with gingival recession, restoring the tooth may result in an increase of the crown length, which may be esthetics unpleasant. After two attempts without success to recover the gingival recession, located on buccal surface of lower incisors about 4mm height, with free gingival grafts, connective tissue graft with microsurgery was realized in the region. After 45 days of pos-operative the abfraction lesions partially recovered with the graft was restored with resin composite, generated a great esthetic result and an esthetic-functional recuperation of periodontal tissues.

56. Root coverage: a clinical comparison between semilunar coronally positioned flap and subepithelial connective tissue

BITTENCOURT, S.*; RIBEIRO, E. D. P.; SALLUM, A. W.; SALLUM, E. A.; NOCITI JR., F. H.; CASATI, M. Z.

The purpose of this randomized, controlled, split mouth desing study was to compare the clinical efficacy of semilunar coronally positioned flap (SCPF) to subepithelial connective tissue graft (SCG) in patients with recession type defects. Fifty patients with Miller's Class I buccal gingival recession were selected. Clinical paramaters measured at baseline and 3 months included depth of the gingival defect, width at the coronal extent of the gingival defect, width of keratinized tissue, probing depth, clinical attachment level, thickness of the marginal tissue, patient perception of pain, and percentage of root coverage. The average percentages of root coverage for SCPF and SCG were 87.6% and 94.3%, respectively. Complete root coverage was obtained in 31.25% of the SCPF teeth and 62.5% of the SCG teeth. No significant difference in the amount of root coverage was found between SCPF and SCG ($p=0.06$). Based on the results of this investigation, the semilunar coronally positioned flap resulted in root coverage similar to the subepithelial connective tissue graft.

57. Ridge augmentation with subepithelial connective graft – case report

PRESTES, C. S.*; PINTO, F. R.; GURGEL, B. C. V.; QUEIROZ, A. C.; TOLEDO S.; CASATI, M. Z.; SALLUM E. A.

A common consequence of tooth loss is alveolar bone resorption with functional and esthetic consequences that turns rehabilitation a hard procedure. In anterior regions due to a thin buccal cortical bone wall this situation turns common. The resulting deformity can lead to a challenger esthetic rehabilitation aspect, mostly in patients with a high smile line. So, a great diversity of surgical techniques has been developed to correct these kinds of defects, most of all using subepithelial connective grafts. The purpose of the present study is to show a case report of ridge augmentation in the region of teeth 11 with a Seibert defect class I using a subepithelial connective graft obtained from palatal region for posterior rehabilitation with fixed partial denture between tooth 21 and 12 achieving esthetic and functional aspects. The case report consists on a six month follow up surgical technique demonstration, tissue conditioning and final rehabilitation.

58. Ortho-perio interaction: orthodontic solutions in a patient with periodontal disease: clinical case.

HADAD, S.*

The aim of study is to promote the interaction between Periodontology and Orthodontics, relationing the main positive and negative factors, proportionating a successful treatment. The clinical case presented shows a 47 years old patient, with the following feature of periodontal disease too much plaque, deep and active pocket, gengival margins with inflammation and lack of clearly contous in spite of orthodontic characteristics are generalized spaces, upper and inferior proclined incisors, occlusal disharmony, tongue interposition miofacial unbalance and lack of lip sealing. All these factors determined an intensive periodontal therapy and small orthodontic movement minusciously seluted, permitting obtain better radiographic paramentrs, group stability occlusal, in spite of esthetics and a higher self estim.

59. Evaluation of nonsteroidal antiinflammatory drugs on bone repair.

RIBEIRO, F. V.*; GURGEL, B. C. V.; SALLUM, A. W.; SALLUM, E. A.; NOCITI JR, F. H.; CASATI, M. Z.

The aim of this study was to evaluate the effect of nonsteroidal antiinflammatory drugs, meloxicam, on bone repair of calvarial defects. It was created bone defects of 4mm in diameter in 36 male rats, which were divided into four groups according to the type of treatment and time of drug administration as follows: a) saline-15 days; b) meloxicam-15 days; c) saline-45 days; d) meloxicam-45 days. After 15 or 45 days postsurgery, the animals were sacrificed for histological and morphometric analyses of defects areas. The medium percentages of remaining bone defect in each group were: group a) 44,5% and 61,617; 5,75% A; b) 57,5% and 61,617; 7,25% B; c) 40,25% and 61,617; 13,75% A; d) 52,25% and 61,617; 17,25% B. After ANOVA ($p<0,05$) of morphometric data, it were observed significantly statistical differences in the percentage of bone filling in the defect area, between control and treated groups, for both 15 and 45 days. However, after defects creation, were not observed significantly statistical differences between the experimental periods of 15 and 45 days. The results showed that continuous utilization of nonsteroidal antiinflammatory drugs, meloxicam, in the periods analysed in this study, can reduce the bone repair (FAPESP-Process 02/13416-6/2003).

60. Osseointegrated implants installation in growing patients: a well succeeded case presentation

OKUDA, K. M.*; REZENDE, M. L. R.; SANT'ANA, A. C. P.; GREGHI, S. L. A.; PASSANEZI, E.

Implants in individuals who have not finished the growth have limited indication because, as they behave like ankylosed teeth, are incapable to follow the eruption of neighboring teeth, resulting in potential infra-occlusion of the implant-supported prosthesis. However, in special cases, they can be indicated for young individuals. A clinical case of a patient who had the congenitally cleft alveolar ridge grafted with iliac bone at 12 years of age and re-grafted with mandibular symphysis bone when she was 13, will be presented. The option for the early implant installation in the region of element 22 had the purpose of preserving the osseous volume and preventing its gradual resorption. The implant received a cemented provisional crown at a 3 months period allowed for osseointegration on a "CeraOne" abutment. Eight months after, it was noticed that significant infra-occlusion of the provisional prosthesis had occurred as well as a discrepancy between the gingival margins of implant and natural teeth. Controls made at every 6 months, comproved the growth stabilization around 17 years of age, when provisional prosthesis was replaced by a metal-free ceramic crown. Even though indication is still limited, osseointegrated implants can be placed in young individuals, since care be taken not only in case selection but also in the follow up until the growth accomplishment.

61. Effect of an estrogen-deficient state and its therapies, estrogen and calcitonin administration, on bone loss resulting from an experimental periodontitis in rats

MOURE, M. C. R.

The aim of this study was to evaluate the impact of an estrogen-deficient state (ED) and its therapies (estrogen and calcitonin administration) upon bone loss resulting from an experimental periodontitis. Fifty-eight Wistar rats were divided into four groups: Group 1 (n=15): sham operated; Group 2 (n=15): ovariectomized (OVX); Group 3 (n=14): OVX plus calcitonin administration; Group 4 (n=14): OVX plus estrogen administration. Twenty-one days after ovariectomy or sham surgeries, the ligature was randomly placed. Sixty days later, the animals were sacrificed and the specimens routinely processed. Intergroup analysis revealed that ED significantly increased bone loss resulting from periodontitis and that such an effect could not be prevented either by estrogen or calcitonin administration (0.34 + 0.13, 0.65 + 0.06, 0.63 + 0.19, 0.67 + 0.28 for groups 1, 2, 3 and 4; respectively). Furthermore, ED presented a direct effect on the alveolar bone regardless of plaque accumulation and this effect may be significantly reduced by estrogen administration (p<0.05). In conclusion, estrogen administration may prevent the direct effect of ED on alveolar bone; however, neither estrogen nor calcitonin administration could prevent this effect when associated with a response to a plaque-related inflammatory process.

63. Root coverage using the coronally positioned flap in smokers

SILVA, C. O.*; SALLUM, A. W.; CASATI, M. Z.

The periodontal literature doesn't have many research about esthetic in smokers. The goal of this study was to evaluate the influence of cigarette consumption on the outcome of coronally positioned flap in the treatment of Miller's class I gingival recession. Ten smokers (test group) and ten non-smokers (control group) patients with recession defect in an upper canine or bicuspid were treated with the coronally positioned flap. At baseline and six months, the clinical parameters probing depth (PD), clinical attachment level (CAL), recession deep (RD), width of keratinized tissue (KT) were determined. A full thickness flap was elevated until the bone crest. Then a split thickness flap was extended further apically and the flap was positioned coronally. For PD no difference (p>0.05) were found in the inter-groups and intra-groups comparison. There was a decrease of KT only in the smokers group (p<0.05). There was an increase in CAL (p<0.05) in both groups, but this difference was not observed between groups (p>0.05). A decrease in the RD was noted six months postoperatively (p<0.05) for both groups. The residual RD was higher in the smoker group than in the non-smoker group (p<0.05). The results indicated that smoking negatively impacts the outcomes of root coverage using coronally positioned flap.

65. Desmoid tumor: report case.

BATISTA, J. D.*; DURIGETTO JUNIOR, A. F.; DURIGETTO, I. L.; COSTA, M. D. M. A.; FURTADO, L. M.

Patient B.S.C., 25 years old, female, melanoderm, came to the Stomatologic Diagnostic Unit of Federal University of Uberlândia in march 24, to avaluation of severe trismus with unknown reason. Extraoral examination shows normal condition. Intraoral examination shows normal mucosa, severe trismus, good oral hygiene. No pain related. Radiographic examination shows radioluscent image with borderline ill-defined, multilocular aspect involving superior area of right mandibular ramus, mandibular notch and coronoid process, suggesting patologic fracture. CT examinations suggests tumor in soft tissues invading medial mandibular ramus, coronoid process destruction, invasion of mandibular notch and anterior area of mandibular ramus. The disease history and clinical characteristic suggest malignant tumor, probably rhabdomyosarcoma or chondrosarcoma. Was made incisional biopsy and the final histopathological result was desmoid tumor.

62. The effect of supragingival plaque control on clinical and biochemical parameters of chronic periodontitis

RIBEIRO, E. D. P.*; BITTENCOURT, S.; NOCITI JR, F. H.; SALLUM, E. A.; SALLUM, A. W.; CASATI, M. Z.

The purpose of the study was to determine the effect of supragingival plaque control on clinical and biochemical parameters of chronic periodontitis. Twenty-five subjects exhibiting at least 4 pockets > 5 mm, non-smoking and with no relevant systemic diseases, were selected for the study. The clinical and biochemical assessments were done before and 21 days after the removal of plaque retentive factors, extraction of condemned teeth and instruction in oral hygiene. The statistical analysis was done with the Student paired t-test (p<0.05) and demonstrated a reduction on the percentage of sites with bleeding on probing from 42.72 + 15.83 to 35.87 + 13.30 (p=0.002). Reduction in probing depth was detected on anterior teeth (initial/final mean: 2.88 mm/2.78 mm; p=0.01) and interproximal sites (initial/final mean: 3.80 mm/3.65 mm; p=0.001). There was an increase from 66.81% to 68.65% in the number of sites with probing depth of 1 to 3 mm and a decrease from 26.21% to 24.17% in those with probing depth of 4 to 6 mm. The BAPNA results showed a decrease from 51.44 + 20.78 to 38.64 + 12.34 (p=0.02). Within the limits of the present study, it can be concluded that supragingival plaque control provides a reduction in gingival inflammation and alterations in the subgingival microflora detected by the BAPNA test.

64. Erythema multiforme; case report

MENEZES, L. F.*; SOBRAL, L. M.; FELIZARDO, K. R.; DELORT, S.; ONOFRE, M. A.

Erythema Multiforme is a disease, which has an unknown cause. It may be triggered by medications and infections, such as the herpes simplex virus. A 22 year-old, white, male patient was referred to Oral Medicine Service of FOAr UNESP by his doctor, complaining about "pruritus on lips and blister formation that disrupted causing purulent plaque all over his mouth". The patient had three previous episodes and he was hospitalized. Those lesions were similar to recurrent aphthous ulceration; however, according to the doctor, they were recurrent herpes simplex, which appear around 5 days before those lesions spread. The lesions disappeared after fluconazol, acyclovir and amoxicilin use. In the course of clinical examination we noticed multiple extensive, painful ulcerations and crusts on the lips. Based on the clinical picture and histopathological examination, the diagnosis detected erythema multiforme triggered by herpes simplex. Treatment consisted of prednisone 20 mg (decreasing dose), systemic acyclovir 200 mg, topical application of triancinolone 0.25 mg on the lips and nistatine rinse. The patient demonstrated marked improvement; however, the treatment with systemic acyclovir was supported for 3 months. The patient has been watched in our clinic and had no recurrent episodes.

66. Calcifying odontogenic cyst associate with odontoma: case report

COSTA, M. D. M. A.*; DURIGETTO JUNIOR, A. F.; DURIGETTO, I. L.; FURTADO, L. M.; BATISTA, J. D.; GUIDI, R.

Patient Z.S.J., female, 40 years old, came to the Stomatologic Diagnostic Unit of Federal University of Uberlândia to avaluation of swelling on the left side of mandible. Patient with neurologic disorders due to an ACV episode using wheel chair and taking neurologic drugs like fenobarbital, carbamazepin, diazepam and clonazepam. The attendant related that the patient had been claiming pain on the swelling with indeterminate time of evolution. Extraoral examination shows swelling in mandible left side measuring about 2 cm of diameter, with consistency fibroelastic, painful on touch, recovered by intact skin without inflammation sign. Intraoral exams shows swelling reduction of vestibular fornix solid consistence measuring about 2 cm diameter, painful on touch and recovered by normal mucosa. Image exams shows, radiopacity mixture involving approximately all mandible, with borderline well circumscribed, corticals expansion and areas with more radiopacity suggesting dental formations. The diagnostic hypothesis were cyst odontoma, calcifying odontogenic cyst associate with odontoma. Was made incisional biopsy with histopathological diagnostic suggesting ghost cell odontogenic tumor. With this diagnostic the patient was submitted excision of the lesion. The final histopathological diagnostic was calcifying odontogenic cyst associate with odontoma.

67. Adenomatoid Odontogenic Tumor: a case report

PINTO*, L. S. S.; CAMPAGNOLI, E. B.; GRANER, E.; COLETTA, R. D.; ALMEIDA, O. P.

Adenomatoid Odontogenic Tumor (AOT) represents 3 to 7% of all benign odontogenic tumors. AOT are characterized by slow, asymptomatic and progressive growth. It is more frequent in women and two thirds are diagnosed in the second decade of life. A 26 years-old female, had a 4 years complain of radiolucent lesion in the right canine region of the maxilla. Intra-oral examination showed small dental displacement and no mucosal alterations. Radiographically, there was mixed, well-circumscribed lesion and some divergence of the roots. The diagnostic hypotheses were AOT, calcifying odontogenic cyst and Pindborg tumor. Under local anesthesia, the lesion was removed and sent to histopathologic examination. Microscopically, the tumor was surrounded by a fibrous capsule and had sheets of spindle epithelial cells and areas of focal calcifications and tubular or duct duct-like structures. Immunohistochemistry was positive for AE1/AE3, 34bE12, CK5, CK14 e CK19, allowing the diagnosis of AOT. After a 3 months follow-up, there is no evidence of recurrence.

68. Oral choristoma: report of case

CAMPAGNOLI, E. B.; GRANER, E.; TOTTL, V.; LOPES, M. A.; JÚNIOR, J. J.

Choristoma is the growth of histologically normal-appearing tissue in an abnormal location. Oral choristomas are frequently of osseous and/or cartilaginous nature, and 85% of cases occur in the tongue, but there are reports of lesions in other locations. Case report: A 67 years-old female patient presented for treatment with an ulcerated lesion with 5x5x2 mm in the middle of the hard palate. The lesion was slightly painful, had reddish coloration with a whitish halo. The initial diagnosis was traumatic ulcer, but the lesion did not disappear after a two weeks follow-up, when the aggressor agent was removed, and an excisional biopsy was performed. Histopathologically, the lesion showed immature ossification areas, compatible with osseous choristoma. The patient is on follow-up to date, without evidence of recurrence.

69. Evaluation of the "fissural" maxillary cysts: microscopic analysis and comprovation of their extinction.

FELIPINI, R. C.; GAMA, R. S.*

The maxillofacial region is affected by a larger variety and greater number of cysts than any part of the body. In the past, the human embryology believed there was a side-to-side fusion of the grooves between the facial processes resulting in various non-odontogenic cysts of the jaws and mouth. From this premise, it was thought of the "fissural" cysts including the median mandibular cyst, median palatine and globulomaxillary. Nowadays, however, the concept of the "fissural" cysts formed by the entrapment of the epithelium during the development of the face can no longer exist. The possibility of these lesions have the diagnosis between the odontogenic epithelium cyst, from inflammatory or developmental origin, has been pointed. The purpose of this paper was to do a microscopic analysis of the so-called "fissural" cyst identified in the archives of the Department of Pathology, School of Dentistry - UNESP, in a period of 23 years, in order to conveniently reclassify them accordingly to their appropriate characteristics. In the 13 cysts found, were compatible with radicular or residual cysts, 3 radicular cysts, 2 keratocysts, 1 residual, 1 dentigerous, 1 nasopalatine duct and one non-cystic lesion. The reclassification helped to prove the inexistence of the "fissural" cysts as separate entities.

70. Ultrastructural features of the buccal paracoccidioidomycosis

VILLALBA, H*; ALMEIDA, O. P.

Paracoccidioidomycosis is a systemic mycosis that frequently involves the buccal mucosa, causing granular, erythematous and ulcerated lesions, called mulberry-like (framboesiform). Although the ultrastructural features of paracoccidioidomycosis have been studied since 1960, there are no detailed descriptions of ultrastructural characteristics of the oral lesions. The aim of this work was to describe the main ultrastructural aspects by transmission and scanning electronic microscopy of the oral paracoccidioidomycosis lesions. Fourteen biopsies of buccal paracoccidioidomycosis were analyzed by transmission electronic microscopy and six biopsies were observed in scanning electron microscopy. Ultrastructural findings in transmission electronic microscopy showed the relation with inflammations cells and the buccal lesions surface caused by fungi.

71. The submandibular gland in the acquired immunodeficiency syndrome: anatomopathological analysis of 103 cases of autopsy.

LEÓN, J. E.*; VARGAS, P. A.*; ALMEIDA, O. P.

A number of inflammatory, infectious, cystic and neoplastic conditions may involve the salivary glands of immunosuppressed patients. The purpose of this work was to evaluate the anatomopathological alterations of the submandibular gland in 103 autopsied patients with AIDS between 1996 and 1999. After dissection, six sections were obtained from each right and left submandibular glands, routinely processed and stained with H/E, Grocott, Mucicarmine and Ziehl-Neelsen. Infectious conditions were identified in 23 cases: mycobacteriosis (09 cases), CMV (09 cases) and cryptococcosis (03 cases). Chronic non-specific sialadenitis occurred in 25 cases (mild: 13 cases; moderate: 10 cases; intense: 02 cases). Only 01 case presented a large B cell non-Hodgkin lymphoma EBV positive. In 82% of the patients the level of T CD4 lymphocytes in the blood was below of 100 cels/µl. Submandibular gland involvement occurred generally as a part of disease dissemination and the lesions had not been previously diagnosed in life. Immunohistochemistry, in situ hybridization and PCR studies becomes necessary for detection of the others infectious agents.

72. Frequency Analysis of Competence Genes in Streptococcus mutans genotypes isolated from children oral cavities

KLEIN, M. I.*; BANG, S.; FLÓRIO, F. M.; HÖFLING, J. F.; SMITH, D. J.; GONÇALVES, R. B.; MATTOS-GRANER, R. O.

Streptococcus mutans (SM) contains a quorum-sensing peptide pheromone signaling system involved in cell density-dependent induction of genetic competence, and in the capacity of biofilm growth. The aim of this study was to identify the frequency of competence genes of SM genotypes isolated from 6-26 months of age children. Genomic DNA was purified from 88 isolates (47 distinct genotypes) and used for screening 17 competence genes by PCR reactions. For the PCR, 12 primer sets were designed to amplify sequences containing one to 3 com genes from the 9 loci on the S. mutans chromosome (comAB, comCDE, comYABCD, comFFa, comEA, comX, mecA, coiA e cinA). An amplicon absence was confirmed by Southern Blot assay. The quorum-sensing system genes comA, comB, comCD, comDE and comX amplicons were not detected in 12,8, 21,3, 32, 29,8 and 19,14% of the genotypes, respectively. The genes involved with the late transformation events comYA, comYBCD, mecA, comFFa, comEA, coiA and cinA amplicons were not detected in 34, 14,9, 14,9, 27,7, 17, 4,25 e 23,4% of the genotypes, respectively. The results shown that the loci comCD (competence stimulating peptide) and comYA (putative ABC transporter) are the less conserved among the strains analyzed. Further analysis of polymorphisms and/or gene expression analysis should help to define the role of these genes in S. mutans biology. (FAPESP 02/13473-0 and 02/07156-1; ProDoc 028/03-7)

73. Strain analysis of elastomer usage like simulation of periodontal ligament using photoelasticity.

ARAÚJO FILHO, G. C.*; BERNARDES, S. R.; NEVES, F. D.; FERNANDES NETO, A. J.; MATTOS, M. G. C.; GOMES, V. L.; BARBOSA, G. A. S.

Laboratorial researches are extremely important for simulation of clinic situations. Many researchers have been using elastomer looking for simulation of periodontal ligament in mechanical studies and they found, for an example, different forms of fracture when it had been used. The proposition of the present research is to evaluate the distribution of stress when simulating periodontal ligament by using elastomer. The use of photoelasticity was required for that. Two alumini cylinders with same design (4x13mm) were used and one of them was recovered with polyeter (Impregum 3M/F ESPE) -cylinder 1- and another without it -cylinder 2. Two blocks of photoelastic resin were made with both cylinders inside it. All groups were loaded in 500 g and 1 Kg and photographed. It was observed different patterns of fringes in the two blocks. For the distribution of fringes it was observed a bigger concentration of stress on the apex of cylinder, but a harmonic distribution of fringes was observed on the cylinder 2. And for the quantity of fringes, it had found bigger values on cylinder 1, 1,9 for 500 g and 3,1 for 1 Kg, while on cylinder 2 it was 1,5 for 500g and 2,3 for 1 Kg. Based on this datas it is possible to understand the absorber capacity of polyeter and it suggests the use of polyeter like periodontal ligament.

75. Influence of the post type on the depth of polymerization of dual resinous cement

VERISSIMO, A. G.*; MENEZES, M. S., FONSECA, R. B., SOBRINHO, L. C., SOARES, C. J.

The aim of this study was to evaluate the depth of polymerization and the influence of the post type on the polymerization of a dual resinous cement. Twelve bovine incisors roots, 12mm length, were selected and randomly divided into 4 groups (n=3): G1- glass fiber post (Reforpost - Angelus); G2- carbon fiber bolts (C-post-Bisco); G3- fiber quartz post (Light-post - RTD); G4- polyethylene post (Aesthtipus - Bisco). After the face-cementation of the posts with a dual resinous cement Rely-X (3M-ESPE), the samples had been transversely severed in five slices with different depths from the coronary limit (mm): P1) 0,0; P2) 2,5; P3) 5,0; P4) 7,5; P5) 10,0. The slices were embedded in acrylic resin and submitted to the knoop hardness test, performed on the cement with a load of 25g for 30s. Data were submitted to anova Tukey test (p<0,05). The knoop hardness results were: G1-P1= 53,5±10,8; P2= 47,9±16,2; P3= 44,6±18,7; P4= 43,8±15,2; P5= 43,2±15,6; G2- P1= 60,9±21,3; P2= 52,0±21,2; P3= 41,9±9,5; P4= 38,9±16,8; P5= 38,4±10,5; G3- P1= 54,1±14,1; P2= 50,6±5,0; P3= 50,1±19,2; P4= 47,9±15,0; P5= 41,2±4,4; G4- P1= 60,9±30,2; P2= 60,2 ±21,5; P3= 47,2±21,0; P4= 45,6±15,1; P5= 38,8±14,9. Irrespective of the limitations of this experiment, it can be concluded that the type of post does not influence in the degree of polymerization of dual resinous cement. However, the increase of the depth reduces the hardness of the resinous cement.

77. Effect of the flask cooling on the teeth displacement in maxillary complete dentures stored in water.

CONSANI, S.*; CONSANI, R. L. X., MESQUITA, M. F., SINHORETI, M. A. C.

The study verified the dental displacement in maxillary complete dentures after water storage. Twenty dentures were made with the teeth arranged in occlusal guide with the lower stone cast teeth. The flasking final pressure of the acrylic resin was made with aid of the RS system and the polymerization in water at 74°C for 9 hours. The deflasking was made after flask cooling in water or in water-cooling plus bench storage during 3 hours. The changes in the linear teeth position were verified with a comparator microscope (Olympus), with tolerance of 0.0005 mm. Collected results in mm were: I-1 (deflasking: water=7.18 and water+bench=7.22; 1 week: water=7.17 and water+bench=7.25; 1 month: water=7.14 and water+bench=7.20; 3 months: water=7.18 and water+bench=7.28), PM-PM (deflasking: water=39.88 and water+bench=39.85; 1 week: water=39.82 and water+bench=39.16; 1 month: water=39.78 and water+bench=39.83; 3 months: water=39.84 and water+bench=39.93), M-M (deflasking: water=53.13 and water+bench=53.03; 1 week: water=53.07 and water+bench=53.18; 1 month: water=52.97 and water+bench=53.00; 3 months: water=53.01 and water+bench=53.13), ID-MD (deflasking: water=37.73 and water+bench=38.06; 1 week: water=38.18 and water+bench=38.09; 1 month: water=38.55 and water+bench=38.35; 3 months: water=38.78 and water+bench=38.49), and IE-ME (deflasking: water=34.65 and water+bench=34.33; 1 week: water=34.17 and water+bench=34.10; 1 month: water=33.76 and water+bench=34.50; 3 months: water=33.81 and water+bench=34.04). The data were submitted to ANOVA and Tukey's test (5%). Except for LI-RI tooth distance in the 1 month water storage period with flask cooling in water plus bench storage during 3 hours, there were no significant difference for the others distances.

74. Effect of vibration intensity during pouring on compression strength of Type III and Type IV dental plasters.

KOMORI, P. C. P.*; CARVALHAL, C. I.; TANGO, R. N.; BORGES, A. F. S.; SINHORETI, M. A. C.; KIMPARA, E. T.

The aim of this research was to evaluate the effect of the vibration intensity during pouring on compressive strength of types III and IV dental plasters. Three type IV plasters (Durone, Troquel 4 and Herostone) and two type III (Pasom III and Herodent) had been manipulated mechanically in vacuum following manufacturers' proportions. Twenty specimens had been gotten for each commercial mark (1cm height and 2cm diameter), poured under two different intensities (low or intense), total of 10 groups (n=10). The samples had been stored by 24hs prior to compressive strength test in a universal machine (EMIC), under crosshead-speed of 0,5mm/min. The data had been submitted to ANOVA and means to the Tukey's test (5%). For the low vibration, higher mean values had been gotten with plasters Herostone, Durone and Troquel 4, which had been superior to type III plasters. In contrast, for intense vibration, plaster Troquel 4 presented similar values to type III plasters. There was no influence of vibration intensity for all evaluated plasters, except for Troquel 4, which was negatively affected by intense vibration. The compressive strength of dental plasters was influenced by commercial marks and types of plaster evaluated and can also be influenced by the vibration during pouring.

76. The influence of the cutting speed on bond strength and integrity of microtensile specimens.

SADEK, F. T.; CURY, A. H.*; LAMBERT, V. O.; MONTICELLI, F.; FERRARI, M.; CARDOSO, P. E. C.

The aim of this study was to verify the influence of the cutting speed during microtensile specimen preparation on the bond strength values and the microscopic integrity of a single-bottle adhesive system to enamel and dentin. 30 sound human third molars were restored with Excite and Tetric Ceram according to manufacturers' instructions, being half in ground enamel [E], and half in flat dentin [D]. After 24 hours storage in distilled water at 37°C, the restored teeth were sectioned in x and y axis under different cutting speed: 100 [1]; 200 [2] or 400 [3] RPM, obtaining stick shaped specimens with cross-sectional area of 1.0 mm². Five specimens of each experimental group were randomly selected for SEM analyses, while the remaining samples were submitted to the microtensile bond strength test. Because the variance of dentin specimens was significantly higher than enamel's variance, analyses of the influence of the cutting speed was performed separately, by subtract. The mean values in MPa were: E1: 27.3a; E2: 25.8a; E4: 21.5b; D1: 36.3A; D2: 36.7A e D4: 38.5A. In the SEM analyses a better integrity of the dentin specimens were observed when compared to the enamel samples, for which the integrity was greater in the lower cutting speed groups. So, it can be concluded that the cutting speed is an important factor that should be considered when enamel is involved, since it may affect the bond strength results and the integrity of the specimens

78. Sorption and solubility of three adhesive systems

MALACARNE, J.*; CARRILHO, M. R. O.; DE GOES, M. F.

The present study evaluated the water sorption and solubility of three commercially available dental adhesives, selected according to their composition: Clearfil SE (SE), Scotchbond Multi-Purpose (SM) and Single Bond (SB). Ten disk-shaped specimens of each adhesive were produced in a brass mould (5.5mmX0.8mm). The adhesives were dispensed into the mould and light-cured for 40s, at 850mW/cm². After processing, the specimens were stored in a desiccator at 37°C and weighted daily until they had achieved a constant mass (m1). Afterwards, they were soaked in distilled water at 37°C. Following the 28-days of water immersion, the specimens were weighted again using an analytical balance (m2), and then dried into desiccators containing fresh silica gel in order to obtain m3. Water sorption (WS) and solubility (SL) were calculated according to the following formulae: SR=(m2-m3)/V; SL=(m1-m3)/V. Data were analyzed by one-way ANOVA and Tukey tests (α=0.05). All adhesives absorbed water within the period of storage. The water sorption (WS) and solubility behavior (SL) of the adhesives were significantly different: WS- SB (103,69±4,99) > SM (34,65±1,53) > SE (30,89±2,62) (p<0,05); SL- SB (47,87±3,34) > SM (-4,78±2,95) > SE (-0,64±1,82). The extent of WS and SL varied according to the resin composition. WS and SL were significantly higher for SB system, the most hydrophilic adhesive employed in the study.

79. Hardness and characterization of the Ti c.p. when its submitted to heat treatments and the action of sodium fluoride

RIBEIRO, A. L. R.*; ROCHA, S. S.; NORIEGA, J. R.; SARTORI, R.; VAZ, L. G.

Titanium has been used as dental material owing to its characteristics as low density, high mechanical and corrosion resistance. The purpose of this study is to analyse the Ti c.p. hardness and its surface using an optical microscopy when it's submitted to heat treatments and corrosion by fluoride solution. The Ti c.p. was submitted to two types of heat treatments, tempering and annealing, after its be submitted to sodium fluoride solution by 1 and 2 months, it's made the characterization through tests of hardness and optical microscopy technique. In the Vickers hardness test was verified statistical differences among the groups, and the heat treatments elevated the Ti c.p. hardness for relieving the material's mechanical tensions and making the crystalline structures more defined, improving the material properties. It's verified that the groups studied when they're submitted to ions fluoride action, after the heat treatments, they had their values of hardness increased, due, probably, to the heat process that increases the material friability. In the optical metalograph analysis it's observed differences among the samples when they're submitted to ions fluoride action, that's because the exposure of the Ti c.p. to fluoride solution damages the surface of this biomaterial. It follows that the heat treatments increase the hardness values and that the action of fluoride ions is corrosive to titanium surface.

81. The direct effect of the Functional Orthopedics Maxillary treatment in masticatory muscles's Electromyographic Activity . A case report.

AMORIM M. M.*; PEDRONI, C. R.; SAKAI, E.; BÉRZIN, F.

The aim of this study was to relate a clinical case which shows the direct treatment effect by a Functional Orthopedic Maxillary Appliance (named SN 6 : Simoes's Network 6) over the electromyographic activity on the masticatory muscles of an adult patient, who has malocclusion (teeth fill up and non occlusal equilibration), with a relate of pain in masticatory muscles. Both sides of the masseter, temporalis and suprahyoid muscles were evaluated electromyographically before the installation of the Functional Maxillary Orthopedic Maxillary Appliance SN 6 and 8 minutes after. The electromyograms analysis shows a great improvement of the electromyographic signal, inspiring a decrease of the masseter and temporalis muscles hyperactivity, with the decrease of RMS (Root Mean Square) signal of these muscles, in rest mandibular position as in isometric contraction in maximal mandibular elevation. It's possible to conclude that the treatment by Functional Maxillary Orthopedics can give a relaxation in the muscles with hyperactivity, which is possible to see by qualitative and as quantitative way. This relaxation runs to a normal muscle activity pattern, which is basic for the treatment goals, giving conditions to the Stomatognathic System repair its physiological capacity and reach equilibrium between form-function binomials, independently of the patient's age.

83. Electromyographic evaluation of postural muscles at work standing in students of different dental clinics

BIANCHI, L.*; CASARIN, C. A. S.; AMBROSANO, G. M. B.; CARIA, P. H. F.

The Cumulative Trauma Disorders (CTD) is the second reason of removing work in Brazil. Among the symptomatology are the neuromuscle fatigue, reasoned for work realized in fixed posture (static work) or with repetitive movements. Was related that 60% of dentists present some kind of skeleton-muscle pain in work environment and the neck, back, shoulders and upper limbs, presents like pain places more frequents, owing at exigencies of high precision, static and support work position, limited movement space and by isometric contraction created by work executed. The present research had like principal goal investigate through surface electromyography the referred fatigue point and the electromyographic behaviour of muscles deltoid (medial portion), trapezius (upper portion) and cervicals, principal posturals muscles in dental work. Thus, were evaluated 30 dental students with age between 19 and 24 years in work posture, divided in 4 groups of 3 different specialties and 1 non-dentist group. The muscles more actives and present fatigue signals were the M. Trapezius and M. Deltoid respectively, in the dentist groups. In the non-dentist group, the cervical muscles presented less activity in relation to others muscles. The referred fatigue was first manifested in a dentist group, independent of speciality. We concluded that the maintenance of ill-posture by prolonged periods, as dental work, take the fatigue and pains muscles, even to a chronic muscle pain. As preventive form and treatment suggest small pauses during the work, with exercises of stretching and postural corrections.

80. Effect of metal primers on the shear bond strength of resin cements adhered to a nickel-chromium alloy.

HANEDA, I. G.*; FONSECA, R. G.; SANTOS, J. G.; ADABO, G. L.

Metal primers have been developed as alternatives to tin electroplating and to silicoating to improve the adhesion of resin cements to noble alloys. Despite their proven efficacy in such alloys, there are no studies to evaluate the effect of these primers on base metal alloys. The aim of this study was to assess the effect of two metal primers on the shear bond strength of their respective resin cements adhered to a nickel-chromium alloy. Forty disks with 9mm in diameter and 3 mm in height were cast. The metal surfaces were ground with 600-grit silicon carbide paper followed by air-abrading with 50µm aluminum oxide particles. The specimens were divided into four groups of ten each and the bonding sites received one of the following treatments: G1) Panavia F; G2) Alloy Primer and Panavia F; G3) Bistite DC and G4) Metalite and Bistite DC. After storage for 24 hours in distilled water at 37°C and thermocycling (500 cycles - 5° and 55°C), the shear bond strength test was performed in a testing machine MTS 810 at a crosshead speed of 0.5mm/min until fracture. The bond strengths of groups 1, 2, 3 and 4 were 8.25 MPa, 5.39 MPa, 5.0 MPa and 4.61 MPa, respectively. Group 1 showed a significantly higher strength than the other groups, which showed no significant difference among them. Although the manufacturer also recommends the association of Alloy Primer to Panavia F for base metal alloys, this primer reduced the bond strength of the cement to the alloy. On the other hand, Metalite did not influence the bond strength of the Bistite DC to the alloy.

82. The Effect of Cervical Mobilization on Electromyographic Activity of Masticatory Muscles in Patients with Temporomandibular Disorders

PEDRONI, C. R.*; OLIVEIRA, A. S.; BÉRZIN, F.

The aim of this study was to determine the immediate effect of cervical mobilization on the electromyographic activity of the sternocleidomastoid, masseter and temporal muscles in patients with temporomandibular dysfunction (TMD). Twenty-two female volunteers participated in this study. The experimental and placebo groups were composed of patients with TMD and had rotation of at least one of the three first cervical vertebrae, while the control group was composed of TMD-free subjects without rotation of the cervical vertebrae. The volunteers were submitted to a electromyographic examination and subsequently, a passive articular mobilization procedure of the cervical column was applied to the volunteers of the experimental and control groups, while placebo group volunteers received a simulation of the procedure. The electromyographic examination was carried out immediately and 24 h after treatment. The Wilcoxon's test was utilized. There was an immediate increase in the electromyographic signal of the masseter and sternocleidomastoid muscles after the cervical mobilization procedure in the treated groups, without any alteration in the temporal muscles in any of the groups. This effect tends to diminish the imbalance of the abnormal pattern of activity between the muscles controlling masticatory force and the positional muscles of the jaw present in TMD patients.

84. Anatomic differences among populations of the 3 continents and of the Brazilians jaws

CARIA, P. H. F.*; PRADO, F. B

The mandibular fossils found in several parts of the planet, show considerable morphological differences, what have to rouse several questions about the change in the shape and in the morphology in these hominids species and among the morphologies characteristics of the modern human jaws. The literature handles subject doesn't present morphologies characteristics of the south-americans modern human jaws, in special of the Brazilians, possibly by the racial plurality and consequent miscegenation, what can determine varied morphological modifications. The present research had like to purpose to analyse and to compare the morphological characteristic of the one hundred masculines human jaws, of the center-west region Brazilians, using thirteen mandibular dimensions determined by Humphrey (1999) with the jaws dimensions of the right populations included of the Africans, Europeans, Asians and Australians. The agreement with the main jaws dimensions, the African populations look to have common morphology between them, but the Brazilians and Australians jaws presented closely values, in relation in a shape and in a size. Referents aspects in adaptations of the masticatory system relation to diet can be discussed, however, small differences among Brazilians, Africans and Europeans populations excel the plasticity of the mandibular morphology and the racial miscegenation in Brazil can have influenced this aspect.

85. Homogenous lyophilized dentin matrix in bone repair: histomorphometric study.

CARVALHO, V. A. P.*; MANCINI, M. N. G.; ALVES, L. A. C.; TOSELLO, D. O.

Lyophilized homogeneous bone grafts appear as an alternative in rebuilding surgeries. The lyophilization allows a reduction in the antigenic load of biomaterials. The osteopromoter capacity of homogeneous demineralized dentin matrix (HDDM) in bone repair has been demonstrated. The aim of this study was to analyze the effects of lyophilized HDDM (HDDM-L) in repairing surgery defects. Eighteen young adult rabbits were divided into two groups (control and treated) of 9 animals each. In both groups, surgical defects of 5mm diameter were done, on the right hemi-mandible and thereafter completely covered by ePTFE-m. In the treated group, particles of HDDM-L were placed in the periphery of the defect. The animals were killed 30, 60 and 90 days after surgery. The hemi-mandibles were removed and after macroscopic examination were demineralized. The cytology of the bone and of the related tissue was described. The mean volume density of neoformed bone matrix was significantly greater in the treated group, in all periods. It was concluded that, HDDM-L is biocompatible, acting as osteopromoter material in bone repair and provides a neoformation of bone tissue in a more rapid manner and in greater volume. In addition to, the HDDM-L lyophilization afforded facility of handling and storing for long periods, maintaining the characteristics of its bioactive components.

86. Analyze of the incisor eruption and alveolar bone of the ovariectomized rats

MARQUES, M. R.*; SILVA, M. A. D., VASCONCELOS, D. F. P., VAZ, S. A. S., MANZI, F. R., BARROS, S. P.

The dental eruption is a complex, multifactorial process and is closely related to tissue and bone strength. The estrogen is one of the bone metabolism regulators and its deficiency commonly results in the body and mandibular bone loss. Therefore, the aims of this study were to evaluate the eruption rate of incisors, continuous growth teeth, and the pattern of alveolar bone remodeling of estrogen-deficient rats. Twenty female rats were assigned into two groups, A and B. Ten rats of group A were bilaterally ovariectomized, while the ten rats of group B were sham operated. One week after surgery, the eruption rates of all animals were measured 3 times a week for 30 days. During this period, alizarin red was administered at days 01, 14 and 28 for bone apposition demarcation. The animals were killed at day 30 and their mandibles were removed. Radiographs were taken of the mandibles and analyzed using a photodensitometer. The histological cuts were observed using fluorescence microscopy. Eruption rates and photodensitometry analyzes were submitted of statistical test. The results demonstrated that in spite of group A have displayed greater radiographic density when compared to group B ($p < 0.05$), eruption rates and bone growth morphometry showed no differences when the groups were compared. Our data suggest that the rat incisor eruption is not influenced by estrogen deficiency.

87. PTH intermittent administration leads to complex alveolar socket alterations during dental eruptive process

SILVA, M.A.D.*; VASCONCELOS, D. F. P., MARQUES, M. R., RELVAS, J. A., BARROS, S. P.

We recently demonstrated that Parathyroid hormone (PTH) protects against periodontitis-associated bone loss and promotes a decrease on rat incisor eruption rate. However, the alterations induced by PTH intermittent administration on alveolar bone are still subject of investigation. In this study, using scanning electron microscopy, we evaluated the influence of PTH intermittent administration on the morphology and area density of Sharpey fibers in the socket of the rat incisor under different functional conditions. Thirty Wistar rats were set in two groups. Treated group received 40 µg/Kg of PTH and placebo group received vehicle, three times week, during 30 days. In both groups 10 rats were kept with incisors under normofunction, 20 rats had the left lower incisor sectioned every other day (hypofunctional) leaving the right lower incisor in hyperfunction. After sacrifice, the mandibles were extracted and prepared for scanning electron microscopy observations. The morphometric data were submitted to statistical tests. It was demonstrated that the PTH treated animals presented an enhancement in the area density of Sharpey fibers and fibrillar structural alterations on the alveolar socket area. We could infer that PTH treatment induced morphological alterations may be one of the factors to explain the decreased dental eruptive rate.

88. Dentinogenesis Imperfecta type II. Histological and ultrastructural aspects.

SALMON, C. R. 1; ROMANI, E.A.P.N1.; GAMA, F. J. R 2.; GAMA, M. H. 2; MANZI, F. R1,2.; PASETTO, S.

Dentinogenesis Imperfecta (DI) is an autosomal dominant disease classified as: Dentinogenesis Imperfecta type I, linked to Osteogenesis Imperfecta; Dentinogenesis Imperfecta type II, without Osteogenesis Imperfecta; and Dentinogenesis Imperfecta type III or Brandywine, a rare form of the disease reported in a tri-racial isolate from Brandywine (USA). DI is mapped to a mutation at 4q13-21 and appears equally in males and females. The aim of this study was to show the histological, ultra structural and radiographic characteristics of patient's teeth affected by DI. This research was performed using teeth of one normal patient, and teeth of one family with DI (mother and daughter). The teeth with DI observed through MEV and polarization microscopy demonstrated few and disorganized or inexistent dentinary canaliculi. These teeth showed high degree of amberlike translucency. The radiographic examination showed short and slender roots with complete obliteration of pulp chamber. In conclusion, the teeth of patients with DI have alterations in the macroscopic and ultrastructural characteristics of the dentine, causing physiological and aesthetic consequences for the carriers of this disease.

89. Anorexia and bulimia: interdisciplinary vision!

OLIVEIRA, T. F.*; BIANCHI, F. J.

The anorexia the associated pathology the alimentary disturbs. Affected people feel a fear to get fat and if they refuse to ingest foods, presenting characteristic of low corporeal weight. The loss of this is seen as a conquest, to the step that the profit is a failure. In the called clinical state of bulimia it is a chronic alimentary disturbs, in which person eats great amount of food in little time of hidden form, however to prevent the weight profit induces vomits it or uses the laxative. This is more difficult of being detected, therefore the patients usually present, normal weight. With regard to interdisciplinary, we must have the performance of the following professionals of the health area: Nutritionist, Dentistry, Psychologists and Psychiatrists, turning in the treatment of these pathologies. The nutritionist had evaluated the state and nutritional deficiency, considering a new diet. In the Dentistry it must observe damages in the tooth and the glands salivaries. This professional can be one of the first if to come across with this state, having directs it for the treatment proposed. The Psychology and Psychiatry will analyze disturbs and will carry through the accompaniment of the patient to reestablish the state emotional. In conclusion these pathologies needs a treatment to multidiscipline.

90. Absence of association between hypodontia and polymorphisms in the promoter of MMP-9 and TIMP-2 genes

NUÑEZ, J. M. C.*; PERES, R. C. R.; ESPÍRITO SANTO, A. R.; LINE, S. R. P

Hypodontia, the congenital absence of one or a few teeth, is one of the most common developmental alterations of human dentition. It may cause masticatory and speech dysfunctions and create esthetic problems with orthodontic and prosthetic considerations. MMP-9 is an important member of the matrix metalloproteinase family that participates in the remodeling of extracellular matrix during tooth development. A C-to-T base exchange at position -1562 creates two different alleles, and the C/T and T/T genotypes promote high activity of the MMP-9 gene promoter. The metalloproteinase-2 tissue inhibitor (TIMP-2) regulates the activity of MMPs in the extracellular matrix and is co-expressed with gelatinases A (MMP-2) and B (MMP-9) during mouse tooth morphogenesis. A polymorphism in the TIMP-2 gene promoter, at position -418, has been found in a Sp-1 binding site. In this study we have investigated the association between these DNA polymorphisms and hypodontia. The significance of the differences in observed frequencies of polymorphisms in control and test groups was assessed by Chi-square test ($p < 0.05$). Our data suggest that the MMP-9 promoter polymorphism is not associated with hypodontia. The high frequency of GG genotype in the TIMP-2 gene promoter in the population studied did not allow any conclusion regarding its association with hypodontia in humans. (Supported by CNPq - Brazil).

91. Chronic hyperplastic pulpitis in young adult – a transmission electron microscope analysis.

MOURA, C. C. G.*; DECHICHI, P., VIEIRA, A. E., NEVES, J. S.

In this study were analyzed 5 pulp polyps from 1st molar teeth of young adult. The polyps were fixed in 2,5% glutaraldehyde and they were divided in two and one-half was embedded in glycol methacrylate and the other half was embedded in an epoxy resin. The histological sections with 3μm were stained with toluidine blue and examined in the LM and the sections with 80nm were examined in TEM. The polyps usually show epithelization with difference in the degree of keratinization. It was observed mast cells between the epithelial cells. The connective tissue showed chronic inflammatory infiltration, with many plasmacytes. The fine structure analyses showed the epithelial cells of basal layers with ovoid nucleus, cytoplasm with a great number of ribosomes and mitochondrias and fewer tonofibrils; the basement membrane was clear with several half-desmosomes. In the prickle layer cells were observed big cells, nuclei with slight chromatin; cytoplasm with filamentous material, a great number of ribosomes and mitochondrias and short prolongations of the plasma membrane with many desmosomes. In the connective tissue were observed macrophages, mast cells and plasmacytes close the epithelium. The deep region showed fibroblasts between collagen fibrils; blood vessels with prominent endothelial and adventitial cells. It may be concluded that epithelium of pulp polyps is similar to the oral mucosa.

93. The Hunter-schreger bands variation in human enamel

RAMENZONI, L. L.*; LINE, S. R. P

The Hunter-Schreger bands (HSB) are an optical phenomenon caused by changing the direction of the hidroxyapatite prisms in the enamel tissue. They are observed as a clear and dark alternate strip of variable widths observed under lateral light. During evolution, the emergence of those bands in the dental enamel can coincide with the adaptation to occlusion changes and type of alimentary diet that could reduce the propagation of fractures and damages in this tissue. This work verified the different thickness of HSB in human teeth and its relationship with the evolutionary adaptation. For this, 70 inferior central incisive teeth were used. They were observed and photographed with magnifying lens and lateral illumination with optic fiber. The contrast of the captured images was increased and then they were analyzed in the "Total Lab Control Centre" program for verification of the widths of HSB. In the end, the different thicknesses of the bands were observed in the analyzed teeth, and the major part of the fractures was limited out of the HSB area. The images suggest an interindividual variation in the thickness of bands existence and then some individuals could develop fractures in the enamel than others.

95. Evaluation of electromyographic activities of masseter and temporal muscles, before and after the use of palatal device in individuals with temporomandibular dysfunction

AMORIM, A. R.*; AMORIM, C. F.; A. V. BALBIN; PACHECO, M. T. T.; OLIVEIRA LUIS V. F.; ZANGARO, R. A.

Electromyography (EMG) has been widely used as a method to help the diagnosis of temporomandibular dysfunctions (TMD). This study's objective was to evaluate the changes in electromyographic activity of anterior masseter and temporal muscles, before and after seven days of utilization of a modified Hawley device. Twenty female patients, 25 + 5 years old, showing spontaneous pain in the region of mastication muscles or in temporomandibular articulation(TMA). Signals were acquired by an electromyograph by EMG System do Brasil Ltda and 2000 Hz sampling frequency. All applicable recommendations from the (ISEK) regarding electromyography's applications. Signal handling consisted in full wave rectification, linear envelope, normalized in time base and amplitude, this one through average value. EMG signal's intensity variability was calculated through the variability coefficient (VC). The comparison between the EMG signals from the various muscles was made with the t-test, with significance level of 0.05. The electromyographic signals before and after the seven days period showed a tendency for increase in the muscular activity, at rest as well as at maximum contraction, without statistically significant differences. Clinical evaluation showed an improvement in the patients' symptoms after the palatal device's use. The above results suggest that the palatal device's use can bring improvements for patients with temporomandibular dysfunction, being necessary to increase the number of observations and follow up time in each case.

92. Osteogenesis imperfecta (OI) is a genetic disorder that affects the production of collagen.

AZEVEDO, D. D.*; CASTRO, M. L.; CASTALDONI, A.; LINE, S. R. P.

The main clinical feature of this disease is bone fragility. OI frequently affects teeth causing rapid abrasion. The aim of the present work was to study the supramolecular organization of collage in people affected with OI by means of polarizing microscopy. The results show that the collagen scaffold in the dentin of affected individuals may present several degrees of alteration. The orientation of collagen differs significantly from normal dentin been in some cases more disorganized and in other cases highly oriented. Interestingly, in some cases the collagen fibrils seem to be oriented perpendicularly to dentin canalicules. It is concluded that mutation in collagen molecules may interfere with the supramolecular organization of collagen.

94. Analisis of MSX-1 gene polymorphisms in sporadic tooth agenesis

BORGES, C. P.*; LINE, S. R. P.

Genetic polymorphisms can influence phenotype by interfering with developmental process. Dental agenesis constitute an interesting model to correlate genetic and morfological variations. The aim of this study was to link MSX-1 gene polymorfisms and sporadic dental agenesis in humans. The sample was composed of genomic DNA from 200 patients: 100 with tooth agenesis and 100 controls. The following procedures were performed: DNA extraction with ammonium acetate, PCR (polymerase chain raction). SSCP (single strand conformation polymorphisms) and DNA sequencing. For both groups, 4 alleles were found: 169,171,173 and 175 base in length. Overall, the 169 allele was the most prevalent. According to an odds-ratio analysis (OR=2,356 ; p=0,0069), the 169 allele was significantly linked to tooth agenesis group, indicating that this allele may play a role in tooth agenesis.

96. Effect of maxillary advancement by distraction osteogenesis on nasal patency: a case report.

MERGULHÃO, T. M.*; FUKUSHIRO, A. P.; SUGUIMOTO, R. M.; TRINDADE, I. E. K.

Maxillary distraction osteogenesis is employed for the correction of severe maxillomandibular discrepancies, usually related to maxillary hypoplasia, which is commonly seen in individuals with cleft lip and palate. The procedure comprises osteotomy, followed by gradual maxillary advancement by a protraction appliance activated daily during 20 to 25 days. The stability of the advancement is achieved by new bone formation. Case report: Patient of male gender, aged 19 years old, presenting with complete left cleft lip and palate previously repaired. The patient presented a severe maxillomandibular discrepancy (overjet = -18mm), with complaints of nasal obstruction and mouth breathing. Rhinomanometry examination conducted at the Laboratory of Physiology of HRAC-USP revealed a significantly reduced minimum cross-sectional nasal area (CSA=0.236cm²). Maxillary distraction osteogenesis was indicated with Le Fort I osteotomy and septostomy. Three months after maxillary advancement and removal of the appliance, the patient was reevaluated and the nasal area was found within the normal limits (CSA=0.662cm²) and breathing complaints were significantly reduced. In the present case, maxillary distraction osteogenesis yielded an improvement in nasal patency, as previously observed after surgical maxillary advancement (Trindade et al, Cleft Palate-Craniofac J. 40(1):54-60, 2003).

97. Electromyographic analysis of mouth's orbicular muscle in individuals with bucal respiratory patterns.

AMORIM, C. F.*; AMORIM, L. J.; A.V.BALBIN; PACHECO, M. T. T.; OLIVEIRA LUIS V. F.; ZANGARO, R. A.

Bucal respiration is believed to bring serious effects in cranio facial development and occlusion, when there is no correlation among the internal and external forces of bucal musculature. This electromyographic study's purpose was to compare the medial superior region of mouth's orbicular muscle in two groups: G1 (predominantly nasal respiratory pattern) e G2 (predominantly bucal respiratory pattern). 50 Brazilian children from 6 to 9 years old were evaluated, 25 boys and 25 girls with Angle's Class II division 1 malocclusion. Signals were acquired by an electromyograph by EMG System do Brasil Ltda and 2000 Hz sampling frequency. All applicable recommendations from ISEK regarding electromyography's applications. Signal handling consisted in full wave rectification, linear envelope through 4th order Butterworth filter, with 5 Hz cut off frequency, normalized in time base and amplitude, this one through average value. EMG signal's intensity variability was calculated through the variability coefficient (VC). The comparison between the EMG signals from the various muscles was made with the t-test for paired samples, with significance level of 0.05. Variations of around 20% were found among samples during the pronunciation of letters A and F, not found at rest. Other new observations to confirm these findings should be performed, specially with older children, to detect the time frame in which occurs a differentiation (the time frame in which, for instance, the bucal habits are installed, and the time frame in which orthodontists or phono must interfere), resulting in labial incompetence.

99. Sensitometric properties assessed from intraoral dental films in different processing conditions

COSTA, C.; TAVANO, O.; PANELLA, J.; VAROLI, F. P.; BUSCATTI, M. Y.

To compare the sensitometric properties of four dental films: Ultra-speed, D-Speed; E-Speed and Insight (Eastman Kodak Company, Rochester, USA) in three different processing conditions. Characteristic curves were constructed for four dental X-ray films using three different processing conditions and the same processing solution (Kodak Ready-matic). All films were automatically processed in three sets using AT2000 machine (Air Techniques, Hicksville, USA) in normal and endo speed and Periomat machine (Dürr Dental, Bietigheim-Bissingen, Germany). Comparative analysis was performed to evaluate two sensitometric properties (sensitivity and contrast) and the base-plus-fog density to each film. The Ultra-speed and D-speed films had presented close results to sensitivity and contrast. The Insight and E-speed films had higher values to sensitivity and contrast than those previous two. The highest film sensitivity, contrast and base-plus-fog density were achieved using AT2000 Plus in normal speed and lowest values to sensitometric properties were found using AT2000 in endo speed, by sub-processing. The new D-speed film can be considered an alternative to Ultra-speed. To reduce the radiation dose to patient, could be recommended for use Insight and E-speed films. Both of them present similar characteristics using the Periomat automatic machine. The Insight must be processed using AT2000 machine in normal speed to achieve optimal sensitivity, contrast and base-plus-fog density.

101. The localization of mental foramen in periapical radiographs

GIROTTI, T.* ; CAPELOZZA, A. L. A.

The radiographic image of mental foramen is a circular, oval or irregular radiolucent area, with one to two millimeters of diameter, located in the lower premolar region between the lower border of the mandible and the alveolar crest (in dentulous patients). The mental foramen is the anatomical repair that presents more interpretation failure. Although its easy identification, its location is not always possible because of anatomical variations in the mesiodistal and inferosuperior planes besides the image density variation. The purpose of this study is to determine the most common localization of mental foramen in periapical radiograph and to compare the results with similar studies involving others populations. For this study were select 400 periapical radiographs from lower premolar area taken in University of São Paulo, School of Dentistry at Bauru, from both gender patients with 14 to 68 years old in a period of sixteen years. The most common position of mental foramen found was; between the premolars apices (70,78%); near to the longitudinal axis of second premolar (21,75 %) and near to the longitudinal axis of first premolar the percent was 7,47%. The variation of the position of mental foramen is not only caused by technical failure in the moment that radiograph is taken. The results of this study coupled with others studies, indicate that the real localization of the mental foramen is anatomically variable as its horizontal position.

98. Current trends in radiographic caries diagnosis

DEVITO, K. L.*; FERREIRA, R. I.; HAITER-NETO, F.; ALMEIDA, S. M.

This investigation comprised a review of the literature on the performance of radiographic methods in dental caries diagnosis. The value and the indications of radiographic examinations were discussed. The present study reported the findings of research with image receptors, computer-automated image analysis, computer-aided image enhancement facilities, and image processing techniques, such as digital subtraction and TACT. On the basis of this investigation, it was possible to conclude that: radiographic images are useful not only for the diagnosis of approximal lesions, but also in detecting occlusal dentinal lesions, which in the past were called hidden caries. Conventional and digital radiography are comparable, because the criteria for the development of films and digital sensors consider the reduction in X-rays exposure as well as the diagnostic precision. Therefore, the choice of an imaging modality will depend on the diagnostic tasks to be accomplished and the financial resources to purchase and support the equipment. Concerning the approximal lesions confined to the outer enamel layer, radiographs in general are not sufficiently precise, however, the dentist may use image manipulation techniques in the digital images to improve the diagnosis. Despite any controversy, the studies on computer-automated image analysis have showed promising results.

100. Radiographic prescription in planning of implants

PEDROSA, E. F. N. C.*; AZEVEDO, C. M.; SILVA, G. P.; FREITAS, D. Q.

The treatment with implants includes pre-surgical radiographic evaluation of the remaining bone. The analysis should include a cross-section image of the reminiscent bone. The aim of this study was to analyze the radiographic prescription in these cases from a city of State of São Paulo. 82,1% of professionals used the panoramic radiography; the conventional tomography and the computed tomography were used in 13,2% and 4,7% of cases, respectively. It was possible to conclude that the panoramic radiography was more used in these patients.

102. Effects of ionizing radiation on rats submandibular glands

PONTUAL, M. L. A.*; TUJI, F.M.; ROMANI E. N.; NOVAES, P. D.; BÓSCOLO, F. N.; ALMEIDA, S. M.

The aim of this study was to evaluate the acute effects of ionizing radiation on the ultrastructure of secretory cells of the rats submandibular glands. Twenty-one male Wistar rats were randomized into two experimental groups: control group and irradiated group. Control group consisted of three animals while irradiated group consisted of 18 rats. After the anesthesia by intraperitoneal injection of sodium pentobarbital, the irradiated group was exposed to a single dose of 15 Gy of g irradiation on the head and neck region. At 4, 8, 12, 24, 48 and 72 hours after the irradiation, the submandibular glands were removed for ultrastructural analysis. Degenerative alterations were noted since 4 hours, they were progressive until 12 hours, with beginning of the recovery at 24 hours and higher organization at 72 hours. Vacuole formations, disrupted cytoplasmic inclusions and nuclear alterations were observed. Secretory granules were fragmented and united. In conclusion, the exposure at 15 Gy of g irradiation causes degenerative process which results in a progressive loss of acinar cells, especially serous cells. This explains more radioresistance of the salivary glands composed mainly by mucous cells, like submandibular and sublingual glands.

103. The importance of multiple radiographic projections in the diagnosis and surgical unerupted teeth planning.

RAMOS, F. M. M.; MARTINS, M. G. B. Q.; NOVAES, P. D.; ALMEIDA, S. M.; HAITER-NETO, F.

The radiographic examination together with the clinical evaluation of patients is essential for a correct diagnosis. The conventional radiographic image presents a limitation because it does not visualize its third dimension. Thus, only two dimensions are registered on the film. An overlapping of the anatomical structures makes the diagnostic difficult. The aim of this study is to report a case of a patient who referred to our Radiological clinic to perform a panoramic radiographic to localize an unerupted tooth. It was possible to observe the presence of an unerupted third molar radiographically projected inside the right maxillary sinus. Additionally, a lateral telerradiographic, Hirtz axial and P.A to the maxillary sinus images were performed; in the lateral telerradiographic, we have also observed the presence of a tooth inside the maxillary sinus. Therefore, in the P.A and axial projection the tooth only showed a close relation with the posterior wall of the maxillary sinus and not localized inside the maxillary sinus, but in the correspondent space of the infra temporal fossa. The radiographic complementation is essential, because it facilitates the correct interpretation of the image and establishes the correct relation between the anatomical structures, avoiding inadequate surgical interventions.

105. Assessment of the images taken with different film-holding instruments

PONTUAL, A. A.*; TERRA, E. R.; CRUZ, A.D.; HAITER-NETO, F.

The aim of this study was to compare the precision of radiographic images taken with three different film-holding instruments: RINN XCP, HANSHIN and INDUSBELLO. The RINN XCP film holding instrument was used with position indicating-device tan and long, while, for the other two marks, it was just adopted the shorter position indicating-device. Periapical radiographs of twelve teeth of dried skulls were taken, and for each tooth, it took place three radiographic repetitions. Three examiners, using a digital pachymeter, measured the teeth and their respective images. The averages of the radiographic measures were calculated and compared with the original size of the teeth. The data was analyzed by analysis of variance and Tukey's test ($\alpha=0,05$). Significant difference was detected between RINN XCP film holding instrument with position indicating-device long, RINN XCP with the shorter position indicating-device and INDUSBELLO film holding instrument ($p < 0,05$). There were no significant differences between RINN XCP position indicating-device long and HANSHIN, however all film holding instruments demonstrated enlargement when compared with the original size of the tooth. In conclusion, the RINN XCP film holding instrument with the longer position indicating-device and HANSHIN film holding instrument result in images closer to the real size.

107. Comparative performance of linear and logarithmically enhanced subtraction images for caries diagnosis

FERREIRA, R. I.*; HAITER-NETO, F.; TABCHOURY, C. P. M.; BÓSCOLO, F. N.

The aim of the present study was to evaluate the diagnostic performance of linear and logarithmically enhanced subtraction images, acquired with digital and digitized radiographs, for the detection of approximal enamel caries lesions. In this investigation, 50 caries-free third molars were immersed in a demineralizing solution in order to induce artificial lesions. Radiographs were taken prior to and after the demineralization period with three digital systems, CygnusRay MPS®, DenOptix® and DIGORA®, as well as InSight® film. Conventional radiographs were then digitized. Linear and logarithmically enhanced subtraction images were examined by an experienced radiologist. For the validation of the radiographic diagnosis, the enamel test areas were submitted to Knoop cross-sectional microhardness profiling. Radiographic interpretation data was evaluated using ROC analysis. The areas under the ROC curves ranged from 0.9474 to 0.9890, and were compared by the chi-square test ($p=0.05$). No significant differences between the subtraction images, acquired with the four studied modalities, were found. Accuracy values ranged from 92.9 to 98%. It was possible to conclude that: linear and logarithmically enhanced subtraction images were diagnostically comparable; digital subtraction is a useful image processing tool and may potentially improve radiographic diagnosis of approximal caries lesions.

104. Cleidocranial dysplasia - case report

CALDAS, M. P.*; RAMOS, F. M. M.; GUEDES, F. R.; NEVES, E. G.; ALMEIDA, S. M.; HAITER-NETO, F.

Cleidocranial Dysplasia is a rare autosomal dominant disease affecting the skeletal and dental system. Its signs and symptoms can vary in expression and occurrence. As some facial disorders we can include prolonged retention of deciduous teeth, delayed eruption of permanent teeth, multiple supernumerary teeth and maxillary hypoplasia with prominent chin. The aim of this study is to describe a cleidocranial dysplasia case emphasizing some facial and dental disorders. A male patient, six years old, came to the Radiological Clinic of the Piracicaba dental school at Unicamp for radiographic evaluation of supernumerary deciduous tooth. Radiographic evaluation showed the presence of mesiodens supernumerary deciduous tooth and multiple supernumerary permanent teeth. Clinical exam showed maxillary hypoplasia and the ability to approximate the shoulders, a typical sign of Dysplasia Cleidocranial. Because the patient is still in craniofacial and dental development, he needs clinical and radiographic accessory. Because the development of malocclusion in patients with Dysplasia Cleidocranial is very common, the patient will be reevaluated and referred to a multidiscipline group.

106. Evaluation of the capacity of the dentists in identifying manipulations in digital radiographic images

GUEDES, F. R.*; MANZI, F. R.; AMBROSANO, G. M. B.; HAITER-NETO, F.; BÓSCOLO, F. N.; ALMEIDA, S. M.

This work had as objective to evaluate the capacity of the dentists in identifying manipulations in digital radiographic images. For such objective, fourteen periapical x-rays had been selected, being these scanned in jpeg format. By means of one graphic program, these images had been modified digitally in order to simulate several conditions in the dental specialities. The images they had been mounted in a presentation in the Power Point format that contained manipulated and not manipulated images. These images had been presented in a computer monitor in a darkened environment aiming a better quality of interpretation of the images. Two hundred appraisers of several specialities including graduate students had been guided to identify the images that contained digital manipulation and the place where the image was modified. As result got only 14,13% of the correct answers for the images with manipulation, and after the statistical analysis of the data (Chi-square Test), it was observed do not have differences statistically significant ($p > 0,05$) when compared the radiologists with the other specialities, having significant differences in relation to the graduate students ($p < 0,05$). Concluding that because of the low percentage in the identifications, it is difficult to dentists to identify the manipulation on digital images, independent of the speciality.

108. Oral plexiform neurofibroma

DANTAS S. P, ROSA L. P, PINTO R. H. R., VARGAS P. A

Neurofibromatosis is a relatively common hereditary condition that is estimated to occur in one of every 3000 births. Nearly 25% of patients with neurofibromatosis present intraoral neurofibromas. A 11-year-old boy was referred to the Stomatology Specialization Clinic ACDC-Campinas to evaluation of a asymptomatic nodular lesion located at floor of the mouth that interfered in the speech and swallow. The clinical hypothesis of ranula was performed but the nodule puncture showed negative result for mucous content. Then an incisional biopsy was performed and the tissue was sent to histopathological analysis. Microscopically, there was a tumor composed by fusiform cells with wavy nuclei and typical plexiform areas. The diagnosis was oral plexiform neurofibroma, which is considered pathognomonic for neurofibromatosis type I. After this histopathological diagnosis, we detected typical clinical features of this disease, for example six or more café au lait spots greater than 1.5cm in diameter in trunk and upper limbs, cephalic perimeter enlarged, and translucent brown-pigmented spots on the iris (Lisch nodules). Dentist should be able to recognize the clinical features of neurofibromatosis type I due to the fact that initial diagnosis of this disease can be performed by him.

109. Free Gingival Graft Associated with Frenectomy

MANETTA, I. P.*; PERUZZO, D. C.; BENATTI, B. B.; BITTENCOURT, S.; NOCITI-JR, F. H.; NOGUEIRA-FILHO, G. R.

The abnormal labial frenulum may cause limitation of lip movements, improper hygiene, diastemas and unsatisfactory esthetics for patients. The frenectomy is a very safe and predictable procedure, however may create reformations in extensive cases. Several mucogingival surgical techniques have been proposed in order to improve the consequences of frenulum removal. In this paper, a free gingival graft in "Y" shape is associated to the frenectomy, providing a adequate zone of attached tissue and favorable esthetics for the patient.

110. Perception of the patients treaties with distraction alveolar osteogenesis for increase of alveolar ridge.

LISBOA, R. B; ALLAIS DE MAURETTE M; MAZZONETTO R

The objective of this study was to evaluate subjectively the perception in relation to the technique of patients operated for increase the alveolar ridge by distraction osteogenesis. 30 patients were appraised, of both sexes, operated by alveolar distraction osteogenesis. The questionnaire had as objective evaluates the perception of trans and ostoperative events. The results show that 85% thought the surgery is perfectly bearable, as well as in the postoperative period (100%), they didn't feel pain during the activations (85%) only pressure sensation (71,43%), and they didn't present difficulty in the activation of the apparel (80%). However 57% of the patients answered that the activation stem was uncomfortable or highly uncomfortable, interfering in some buccal functions. 85% of the patients would undergo the surgery again and that when compared with other reconstruction methods as bone graft for instance 42% of the patients referred that this was considerably more uncomfortable. To weigh of being a technique relatively traumatic, it has a high acceptance among the patients submitted.

111. Quantitative and qualitative criterions used in odontological identification.

MOURA, L. C. L.*; MIRANDA, L. I.; DE LA CRUZ, B. V. M.; FRANCESQUINI JR, L.; AMBROSANO, G. M. B.; DARUGE JR, E.

The objective of this study was to comment the criterions used for odontological identification and to discuss the parameters that allow to positives or negatives an identification. This concern comes upon the reality of Legal Medical Institutes. There are two main reasons for dental characteristics been used in identification: the first one consist in physical and chemical dental resistance and the second one it's in the high probability of combinations related to the presence or absence of dental elements and the types of restoratives materials used that permit an analyze of the probabilities of almost two billions and a half of possible combinations. The principal problem it's what are the minimum criterions and parameters used to establish identification. Is there a necessity of a quantitative or qualitative analyze? With this purpose it was made a review of the literature concerning with problems that involve an identification in a criminal investigation. The analyze made by the different authors permit to observe that there is not a uniformity about criterions and parameters used in odontological identification, which permit to conclude that upon criterion offered today by literature yet not exist means to establish enough qualitative fixed points to obtained a positive identification.

112. Odontological prontuary in public health: forensic aspects

MENEGHIM*, Z. M. A. P.; PEREIRA, A. C.; MENEGHIM, M. C.; MEROTTI, F. M.

The odontological prontuary holds important records collected during the anamnesis — a method of outlining and collecting data concerning oral diseases and the need for treatment. The prontuary includes clinical considerations and administrative and legal aspects. Also, it plays a very important role in identifying skeletons (framework) and carbonized corpses. Therefore, the aim of the present study was to evaluate the knowledge of each of the buccal health coordinators responsible for the counties involving the DIR - XV region (São Paulo, Brazil), concerning the forensic aspects of the clinical odontological prontuary used in these counties. Each of the coordinators received a sealed envelope holding a questionnaire to be answered. Out of 21 counties, 18 (85.71%) responded to the questionnaire. The results showed that 55.55% reported that the keeping time of the prontuary should be ad eternum; 47.06% affirmed that handing in the documentation to the patient was mandatory; 61.11% of the coordinators are aware their responsibility toward documentation. In conclusion: a) the coordinators lack some knowledge concerning the forensic aspects, filling out process, and components of the prontuary and there is no standardization regarding the filling out process, either in the cases of urgency or scheduled appointments; b) the keeping time of the prontuary is misled by most of the coordinators; and c) a significant number of coordinators are aware of the legal responsibility over all clinical procedures.

113. Human identification using dental prosthesis and gypsum patter. A case report.

SILVA, R. F.*; DARUGE JÚNIOR, E.; DARUGE, E.; FRANCESQUINI JÚNIOR, L.; DE LA CRUZ, B. V. M.; RAMOS, D. I

Actually, the role of forensic odontologist in identification of carbonized corpses it's a routine in Legal Medical Institutes in our country. Identification of individuals, in these cases, may become difficult because of the action of fire and heat, which can destroy most of the characters, that subsides traditional identification methods, as fingerprints. However, bones, teeth and dental materials may present fewer modifications because of their resistance to the action of high temperatures. Thus, the observation and analyze of odontological particularities from a body may become enable, but identification yet depends on an odontological documentation produced in life. This documentation may be related to the different specialties of odontology and the more common documents produced are notes made on clinical records, radiographs, photographs and plaster models. The objective of this study was to present a clinical case where a carbonized corpse was positively identified using a plaster model and a removable partial prosthesis. The identification of this corpse demonstrated the importance of the role of forensic odontologist in Legal Medical Institutes, emphasizing that a well-detailed and recorded odontological documentation is fundamental in the elucidation of facts of the interest of Justice and in cases of human identification.

114. Pemphigoid; a case report.

BICUDO, M. M.*; JORGE, S. L. V.; JORGE, R. S.; JORGE, J

A 36 year's old woman was referred to the Oral Medicine Service at ACDC, Campinas – SP, complaining of multiple sore areas in the gingival. Lesions had been present for about six months, but were not painful, nor had bleeding tendency. Oral inspection showed several erosive and reddish areas in both attached and free marginal gingival. Those areas had normal sensibility and showed plain surface. Oral conditioning methods were set, with emphasis on oral plaque control. After two weeks, gingivitis had significantly reduced, but some erosive areas persisted. Clinical differential diagnosis was bullous pemphigoid, pemphigus vulgaris and erosive lichen planus. Nikolsky's sign test was positive and biopsy confirmed the diagnosis of pemphigoid. The patient was referred to a dermatologist and continued the periodontal treatment.

115. Analysis of presence of mast cells in pulpitis and apical lesions using immunohistochemistry

PASCHOAL, M. A. B.*; RODINI, C. O.; NOVARETTI, C. R.; LARA, V. S. PASCHOAL, M. A. B.*; RODINI, C. O.; NOVARETTI, C. R.; LARA, V. S.

Mast cells have been shown to be capable of participating on modulation of humoral and cellular responses, as well as in the vasodilatation and vascular permeability. Published data are contradictory in relation to the presence of these cells in pulpar tissues and apical lesions. The objective of this investigation was to determine the presence of mast cells in these tissues from samples obtained from the files of the Anatomical Pathology Laboratory (FOB-USP). A total of 7 serous acute pulpitis, 6 ulcerative chronic pulpitis, 5 hyperplastic chronic pulpitis, 20 apical granulomas and 20 periapical cysts were used. Using immunohistochemistry by means of anti-human mast cell tryptase antibodies, the positive cells were quantified and statistically studied (Mann Whitney Test), in apical lesions. In pulpar tissues, scarce immunostaining was verified only in hyperplastic chronic pulpitis. In periapical lesions, mast cells were mostly found in periapical cysts compared to apical granulomas. The analysis these results lead us to propose a more important participation of neuropeptides on the vascular phenomena in pulpar tissue, as well as a major participation of mast cells in the evolution of periapical cysts, compared to granulomas, including repair and vascular process, and immunoregulation or even cystic expansion.

117. Relation of the oral hygiene with gustatory sensitivity and oral health in the elderly.

ALMEIDA, S. M.*; DUTRA, S. M. V.; COSENTINO, G. V.; PEREIRA, F. R.; MARQUES, A. C. L.; CARVALHO, Y. R.; SCHEID, M. M. A.; MANCINI, M. N. G.

This work aims at relating the oral hygienic with gustatory sensitivity and oral health in the elderly. Fifty-four elderly institutionalized patients were selected and anamnesis, questionnaire and dental clinic examination were performed. Different concentrations of sweet, sour, salty and bitter taste solutions were used for the gustatory sensitivity test. The detection threshold (DT) was the minimum concentration at which the patient distinguished the solution as different from the water and the recognition threshold (RT) was when the patient recognized the flavor. Sialometry was carried through and oral hygiene cleaning was done twice a day for five weeks. Sialometry and the gustatory test were repeated and the final values of DT and RT were obtained. The increase of DT and RT in relation to the periods before and after the hygiene cleaning were, respectively: acid tartaric (sour) 29.62% and 38.88%, caffeine (bitter taste) 35.18% and 46.29%, sacarose (sweet) 42.59% and 42.59%, NaCl (salty) 44.44% and 53.70%. The McNemar statistic test demonstrated significant increase of DT for caffeine and RT for caffeine and NaCl. It can be concluded that the oral hygiene cleaning improved the gustatory perception, food acceptance, general health conditions and self-esteem of the patients.

119. Oral Paracoccidioidomycosis: Case report

ELIAS, R. A.; SACILOTTO, C. R.; ARAÚJO, D. Z. R.; JORGE, R.; LOPES, M. A.

Patient I.J.G., 63 year-old, Caucasian, was referred to the ACDC Stomatology Specialty Clinic for evaluation of oral lesions. The patient reported that the lesions were associated to the partial removable prosthesis for about 1 year. The patient also related that he was diagnosed with Paracoccidioidomycosis being treated with Sulfa about 8 months ago. On clinical examination it was observed ulcerated lesions on the buccal mucosa, lower lip and tongue difficulting the mouth opening and impossibilitating prosthesis remotion. Incisional biopsy was performed on the lower lip and the diagnosis was again Paracoccidioidomycosis, being referred to the Department of Infectious Diseases - Unicamp, suspecting of drug resistency. The patient returned 25 days informing that he was start on drug treatment again. After 1 month of treatment the lesions almost disappear totally, improving the tongue movement. However, the patient could not remove the prosthesis for hygiene. After 3 months, the patient is well without complaints and now he is able to remove the prosthesis. The patient is also practicing physiotherapy to improve mouth opening. This case emphasize the importance of patient follows the treatment, because interruption or irregular use of medication may lead to severe problems in the patient health.

116. Analysis clinicopathological and immunohistochemical of 33 cases of adenomatoid odontogenic tumor.

MATA G. M.*; VARGAS P. A.; CARLOS R.; MOSQUEDA-TAYLOR A. A.; LEON J. E.; ALMEIDA O. P.

In the present study we depicted the histopathological and immunohistochemical features of 33 cases of adenomatoid odontogenic tumor (AOT) from two centers of oral diagnostic (Mexico and Guatemala). 19 AOT cases (57.5%) occurring in male and 14 (42.5%) in female. The mean age was 17,7 years, and maxilla was affected in 21 cases and the mandible in 12 cases. 32 cases were intraosseous and only 1 case was peripheral. Red Congo stain confirmed the presence of amyloid-like material in 23 cases mainly in the areas alike to Pindborg tumor. Immunoreactions for AE1/AE3, 34βE12, CK5, CK14 and CK19 revealed strong positivity in all AOT cases. CK7 was immunoreactive for 9 cases, while 7 cases showing positivity for CK13. Antibodies AE1/AE3, 34βE12, CK5 and CK14 were strongly positive in areas analogous of Pindborg tumor. Vimentin was positive in 26 cases, where 20 cases showed positivity in the layer cuboidal cells, while 2 cases were intensely positive in areas similar Pindborg tumor and 4 cases were positive in the cribriform areas.

118. Proliferative Verrucous Leucoplakia

SACILOTTO, C. R.; ELIAS; R. A.; REIS, A. N.; LOPES, M. A.

Patient, J.M.J. 64-year-old, black and female was referred to the ACDC Stomatology Specialty Clinic for evaluation of white patches in the oral cavity. The patient was previously referred to two other medical services being diagnosed with candidiasis and treated with anti-fungal. As the lesions did not disappeared, the patient returned to the dentist, who referred to ACDC. On oral examination, it was observed white lesions involving the buccal mucosa, soft palate, inferior alveolar ridge, non removable to scratch and with verrucous features. Incisional biopsy of the buccal mucosa was performed and microscopically displayed hyperkeratosis, acanthosis, severe epithelial dysplasia compatible with the clinical diagnosis of leucoplakia. With the association of clinical and microscopical characteristics it was established the diagnosis of Proliferative Verrucous Leucoplakia. Considering the high risk of malignant transformation and the extension of the lesions, the patient was referred to the surgical service for treatment with laser of high energy.

120. Sublingual salivary gland tumors: clinicopathologic study of 6 cases

PEREZ, D. E. C.*; PIRES, F. R.; ALVES, F. A.; KOWALSKI, L. P.; ALMEIDA, O. P.

Sublingual salivary gland neoplasms are rare, accounting for only 0.5% to 1.0% of all epithelial salivary gland tumors. The mucoepidermoid carcinoma (MEC) and adenoid cystic carcinoma (ACC) are the most common tumors. The aim of this study is assessment the clinical and histological features of 6 cases of sublingual salivary gland tumors treated in a single institution. The clinical data were obtained from the medical records and the histopathological slides were reviewed for to confirm the diagnosis. Four cases were ACC and 2 MEC. Four patients were female (55, 65, 67, 70 years old) and 2 male (16 and 58 years old). Half of the cases presented as T2N0M0 and the other half T3N0M0. Histologically, all ACC were of the cribriform histological type and showed perineural invasion. One MEC was classified as histological intermediate grade and one histological high grade of malignancy. All cases were submitted to wide surgical excision with resection of the involved sublingual salivary gland. Five patients (3 ACC and 2 MEC) did not show tumoral recurrence after a mean time of 97.8 months of follow-up (ranging from 24 to 216 months). One patient with ACC presented local and distant (lung) recurrences and died by disease after 13 years of treatment. According to our findings, the sublingual salivary gland tumors are very rare, all are malignant and MEC and ACC are the most common tumors.

121. Sublingual gland involvement in advanced AIDS: autopsy survey of 92 cases.

ROCHA, L. A.*; ARCE, L. D. C; LEON, J. E; ALMEIDA, O. P; VARGAS, P. A

A number of inflammatory, infectious, cystic and neoplastic conditions may involve the salivary glands of immunosuppressed patients. The purpose of this work was to evaluate the anatomopathological alterations of the sublingual gland in 92 autopsied patients with AIDS between 1996 and 1999 in the SVOC - FMUSP (Medical School of São Paulo University). After dissection, six sections were obtained from each right and left sublingual glands, routinely processed and stained with H/E, Grocott, Mucicarmine and Ziehl-Neelsen. The sublingual gland was considered normal in 55 cases. Infectious conditions were identified in 12 cases: mycobacteriosis (07 cases), cryptococcosis (04 cases) and CMV (01 case). Chronic non-specific sialadenitis occurred in 25 cases (mild: 21 cases; moderate: 03 cases; intense: 01 case). Only 01 case presented a large B cell non-Hodgkin lymphoma EBV positive. In 92,4 % of the patients the level of T CD4 lymphocytes in the peripheral blood was below of 200 cels/ μ l. Sublingual gland involvement occurred generally as a part of disease dissemination and the lesions had not been previously diagnosed in life. Clinicians should consider sublingual gland involvement, when evaluating infectious disease extension in advanced AIDS patients.

122. Mandibular and multi-site brown tumor in secondary hyperparathyroidism: case report

AGOSTINI, M.*; LEON, J. E.; GRANER, E.; DI HIPÓLITO JR., O.; ALMEIDA, O. P; JORGE, J.

Hyperparathyroidism is characterized by increased secretion of parathyroid hormone. There are two types: primary and secondary. Primary is result of uncontrolled PTH production. Secondary occur when PTH is continuously produced in response to low levels of calcium. The manifestations include reduced bone density, subperiosteal bone resorption, absence of lamina dura of teeth and brown tumors, that occur most frequently in ribs, mandible, clavicle, pelvis and rarely in cranium and face. It is found in mandible in 4% of the patients with HPT. We report a case of a 45-year-old woman that has been undergoing hemodialysis for about 6 years due to chronic renal failure, with a painless swelling in the mandible, duration of one month, difficulting wearing of the complete denture. Physical examination revealed a firmly fixed mass of 2 x 2 cm in left alveolar ridge. On pantomographical radiography a radiolucent unilocular lesion was found. Occlusal radiography showed an expansive lesion. Incisional biopsy was performed and histopathologically there were several giant cells in a mononuclear stroma, suggesting central giant cell lesion. The laboratorial findings revealed high level of PTH, serum phosphorus and alkaline phosphatase. Ultrasound demonstrated swelling of the parathyroid gland. Osseous scintigraphy indicated many lesions in costal arches, pelvic and femoral areas. The patient was referred to treatment.

123. Craniomandibular disorder in elderly people

ABUD, M. C.* ; MARCHINI, L.

The present work has as purpose to present a literature review about craniomandibular disorders in the elderly. Epidemiology surveys worldwide (Ettinger, 1993, Meneghim e Saliba, 2000, Shah e Sundaram, 2004) show that the oral health of the elderly is very inadequate, causing systemic complications and having a negative impact on the quality of life. The addition of the inadequate state of oral health with the aging related morfo-physiological alterations of the masticatory system allows some authors (Iacopino & Wathen, 1993, Marchini e Cerveira Netto, 1999) to believe that a possible greater incidence of craniomandibular disorder could happen in the elderly compared with other age groups, and this is also clinically verified. However, it has clinical works that find a low incidence of signals and symptoms of craniomandibular disorder in elderly populations (MacEntee et al., 1987; Santos et al., 2004). On the basis of consulted literature, one can conclude that an inconsistency is shown when dealing with the incidence of craniomandibular disorder in the elderly. The accomplishment of nationally based epidemiology surveys, with adequacy statistics and using internationally accepted parameters, is necessary for evaluation of the necessities of treatment of the Brazilian elderly. In the same way, standardized and controlled clinical works must be done to evaluate the influence of the diverse variables that influence this condition in this specific population.

124. Benign Oral Solitary Fibrous Tumor

SILVA, A. A.*; MATA, G. M.; LÉON, J. E.; GRANER, E.; VARGAS, P. A.

It is a benign or malignant mesenchymal tumor, that occur manly in pleura, although other sites can be affected too. Intraorally, there are only 37 cases previously reported. A 38 year-old male visited the Orocentro (Oral Diagnosis Ambulatory) complaining of a cheek swelling with one month of duration. Intra-oral examination showed a mobile painless fibroelastic nodule measuring 2.0cm in maximum dimension located in the left cheek. The lesion was well circumscribed and the overlying mucosa was normal. The clinical hypothesis were lipoma and benign salivary gland tumor. Excisional biopsy was performed and the material was sent to histopathological analysis. Microscopically, it was well-circumscribed lesion, rich in spindle cells patternless distributed, but in some areas forming fascicles. Hypo and hypercellular areas were observed with a stroma formed by thin collagen fibrils. The immunohistochemical findings showed strong immunoreactivity for vimentin, CD34 and bcl-2, and negativity for other immunomarkers, establishing the diagnosis of benign oral solitary fibrous tumor. After 7 months of follow-up, no recurrence has been observed.

125. Effect of the alcoholic diet in the morphometry of submandibular glands of *Rattus norvegicus*

YUJRA, V. Q.*

The chronic ingestion of alcohol reaches several tissues, besides the salivary glands, provoking morphologic alterations of the same ones. The objective of the present study went verify the effect of the consumption of ethyl alcohol on the width and length of the left submandibular glands of adult female rats. 75 rats divided in 5 groups of 15 animals in agreement with the administered diet were used: control (G1), alcohol 9,5% (G2), isocaloric 9,5% (G3), alcohol 19% (G4) and isocaloric 19% (G5). After an adaptation period, were administered alcoholic solutions or of sucrose for 8 weeks. To the sacrifice, the glands were removed and measures with relationship to the length and width with a digital caliper. The medium values for group were submitted to the variance analysis (ANOVA, post hoc Tukey). Any difference of $p < 0.05$ was considered statistically significant. The statistical treatment of the groups G1, G2 and G3 didn't show significant differences in the morphometry of the glands. However, when applied for G1, G4 and G5 indicated length and width measures significantly smaller in the group G4 ($p < 0.05$). Therefore, it was observed that adult rats submitted to the alcoholic diet in the concentration of 9,5% didn't show alterations in the morphometry of the submandibular glands. However, when the alcoholic diet was administered in the concentration of 19% it can be verified length and width reduction of these glands.

126. The esthetic and conservative possibility of dental microabrasion.

KORMANN, T.*; CONTRERAS, E. F. R.; SOUZA JR., J. A.

There is an ever-growing demand for esthetic dental treatment. Treatment modalities include crowns, bleaching, and ceramic or composite veneers. A more conservative treatment option, enamel microabrasion, may be indicated in certain clinical scenarios: incipient caries, superficial intrinsic enamel discoloration defects, dental fluorosis and white spot. The method is safe, easily performed, and causes no discomfort for the patient. A simple technique use 18% hydrochloric acid and pumice to achieve color modification and improve esthetics. The purpose of this clinical report is to describe the use of enamel microabrasion for a patient with discolored anterior teeth.

127. Influence of thickness and shade of ceramic on the polymerization of a dual resin cement

SILVA, N. R.*; FONSECA, R. B.; CARLO, H. L.; SOARES, C. J.

The aim of this study was to evaluate the influence of thickness and shade of feldspathic ceramic on the degree of polymerization of a dual resin cement. 95 bovine incisors were embedded in resin and divided in 18 groups (n=5). In the buccal surface was prepared circular cavity of 4.0 mm (diameter x depth). Was prepared ceramics restorations with 4.0 mm in diameter and 1, 2 e 4 mm of thickness, in shades A1, A2, A3, A3.5 e A4. The resin cement was inserted in the cavity, a mylar strip was positioned over that and cured for 40 s with a light source (600 mw/cm²) according to each group; control (C)- without the restoration, in the distance of 1, 2 e 4mm; the remaining groups had the restorations positioned between the resin cement and the light source during polymerization. Vickers hardness test - 50 gram for 30 s was performed. The ANOVA (5x3) following Tukey test 9p, 0.05 demonstrated significance in the interaction between shade and thickness. The results were: A1/1 (24,4/2,3); A1/2 (24,1/ 0,74); A1/4(18,1/1,45); A2/1(24,9/3,67); A2/2(26,8/7,34); A2/4(13,8/1,35); A3/1(24,5/5,4); A3/2(25,5/4,99); A3/4(11,9/2,22); A3.5/1(21,5/1,17); A3.5/2(21,4/2,03); A3.5/4(9,1/2,22); A4/1(22,0/2,35); A4/2(21,8/2,4); A4/4(6,5/1,36); C/1(25,5/2,3); C/2(24,3/3,9) e C/4(23,4/2,8). The increase both on shade saturation and thickness of ceramic material resulted in lower polymerization degree of resin cement.

129. Surgery procedures use in restorative dentistry

CALABRIA, M. P.*; SILVA, B. M. H.; COLARES, J. C. M. R. N.; CARVALHO, R. M

Restorative aesthetic procedures are more and more including in relation to the complexity degree and involvement with other specialties inside of the dentistry. The dentistic and the periodonty present an intimate relationship mainly when it is treated of involvement of the cervical end of an element dental associate to a possible loss of biological distance that commonly affect the tissue dental support. The recovery of this space is fundamental so much for the gum health as for the making of a restoration well adapted and with very defined cervical end, respecting the involved structures so much of the hard and soft tissues, for the involved materials and the technique to be realized. This work comes through a clinical case to show a restoration of direct resin, being a cavity OD with the use of pins for reinforcement of the peaks and the accomplishment of a gingivoplastic that the hiperplasic of the tissue was associated. After the removal of the excess of the tissue hiperplasic the cervical end came very defined and later the restoration was made with the use of pins (retopin), protection materials (glass ionomer and amalgam) and subsequent making of the restoration with composed resin.

131. Influence of an ultrasound device during removal of fixed daily pay-manufactured intra-radicular retainers with two different types of cements

QUEIROZ, E. C.*; MENEZES, M. S.; BIFFI, J. C. G.; MOTA, A. S.; SOARES, C. J.

The aim of this study was to evaluate the influence of an ultrasound device during removal of fixed daily pay-manufactured intra-radicular retainers with two different types of cements. Forty bovine incisors were selected, endodontically obturated and immediately alleviated, and the post were cemented with zinc phosphate cement (n = 20): G1SU (n=10) and G1C (n=10) and glass ionomer (n=20): G2SU (n=10) and G2C. The groups that used the ultrasonic device were called US and the ones that had not used were called C. The samples were submitted to the tension test on a mechanical testing machine (EMIC DL- 2000) at a crosshead speed of 0,5mm/minute. Data were submitted to ANOVA and Tukey test (p<0.05). The results were (Kgf): G1C (33.66)a; G2C (49.20)b; G2US (33.75)c e G1US (18.37)d. It can be concluded that in the removal of daily pay-manufactured metallic bolts, settled with zinc phosphate cement and glass ionomer, the use of the ultrasonic device was effective and, the glass ionomer cement got higher values of tension strength than zinc phosphate cement.

128. Posterior tooth restoration by means of the ips empress II system: operative dentistry / periodontics interrelation

FERNANDES, T. M. F.*; POLETI, M. L.; COSTA, L. C.; SENE, F.

Dentistry passed for a transformation of concepts and techniques aiming at to the conservation of healthy dental structure and the attainment of esthetic restorations, with the advent of the etching of the dental tissue and the evolution of the adhesive systems. The restoring materials, however, have passed for a technological evolution, aiming at for more adjusted properties to the use in diverse types of situations. The ceramics offer excellent esthetic properties, biocompatibility, chemical stability and resistance wear. Some ceramic systems have being developed and perfected, objectifying the confection of works without the necessity of the metal, amongst them system IPS Empress II. The aim of this work is to present one clinical case where the patient presented the 46 with great coronary destruction and periodontal involvement, needing surgery procedure for reestablishment of the biological distances. The restoration was conected by means of the IPS Empress II system.

130. Effect of different restorative combinations in the microtensile bond strength of composite repairs

VOLTARELLI, F. R.*; PERIS, A. R.; CAVALCANTI, A. N.; MITSUI, F. H. O.; MARCHI, G. M.

The aim of this study was to evaluate the microtensile bond strength of composite repairs performed with different combinations of restorative materials, and submitted to mechanical load cycling. Fifty blocks of high-viscosity composite resin (Tetric Ceram HB) were prepared, and randomly allocated into five groups (n=6) according to the following combinations: G1 - Control (without repair); G2 - Single Bond + Filtek Z250; G3 - Single Bond + Filtek Flow + Filtek Z250; G4 - Single Bond + Tetric Ceram HB; G5 - Single Bond + Filtek Flow + Tetric Ceram HB. Following repair procedures, the specimens were submitted to mechanical load cycling (100,000 cycles; 80N). Then, three slices of each block were obtained, in which constrictions were made in the adhesive interface, in order to obtain an area of approximately 1mm². The microtensile test was performed in an universal testing machine (V=0.5mm/min). The statistical analysis (ANOVA/Tukey, p<0.05) showed the following results (mean and SD/MPa): G1: 42.97/11.96A; G2: 28.66/6.54AB; G3: 28.93/3.86AB; G4: 25.98/12.28B; G5: 24.918.79B. It could be concluded that the procedure of repair can be affected by the restorative material used.

132. MEV analysis the effect of products and techniques used in the cleanness of the dentin substrate

PEREIRA, J. C.; SOARES, C. J.; SOARES, P. V.; SIMAMOTO-JÚNIOR, P. C. 3

This aimed of this study is evaluate by means of MEV analysis the effect of products and techniques used in the cleanness of the dentin substrate. Sixty bovine incisors had the superficial dentine of the central portion of the crown displayed for consuming with sandpapers n.600 and submitted the different protocols of Prophylaxis: hydrogen peroxide 3%(H2O2); chloroxidine 0,12%(CLOR); sanblasting with bicarbonate of sodium (JBS); sanblasting with aluminum oxide of 50µm(JOA); pumice past + deionized water (PP) and without profilaxia (C), analyzed in MEV. From the microscopical analysis it was verified precipitated on the dentin substrate when the sample was submitted Prophylaxis with JBS, in the group that received Prophylaxis with PP could be observed grooves on the dentin, and in the groups that had received Prophylaxes with H2O2 and CLOR had not been observed mechanical alterations, however, it can be suggested chemical alterations between products of reaction of these composites with the dentin, longer group of JOA observed structural alterations, as depressions and cracks in the dentin substrate. In all the groups did not have removal accomplish of the Smear Layer before the acid conditioning. Of this form, products and techniques used in the cleanness seem quimicamente to modify and to intervene structural or the dentin substrate, being able to intervene with the adhesive quality of the dentin.

133. Cosmetic remodeling: self-esteem and esthetics

SHIRATORI, F. K.*; JANUNE, D. D. J.; PAZINATTO, F. B.; ISHIKIRIAMA, A.; ATTA, M. T.

Microdontics affects most frequently lateral incisors and, depending on the shape and size of the affected tooth, may influence on the esthetic and psychologic perfil of patients. In the case of simple esthetic involvement the treatment indicated is the cosmetic remodeling, that can modify the esthetics rapidly and with low cost treatment. In this case report is related the treatment of a 12 years old child with a microdont tooth (22). Patient was discontented with her "abnormal" smile, been introverted. The planning treatment was cosmetic remodeling with resin composite. To better perform the restoration some factors were focused: patient age, tooth position at maxillary arc and contiguous teeth eruption periods. Thus, after finished the cosmetic remodeling patient has shown satisfaction with the esthetic result. Thus, it was observed the recovery of patient's self-esteem, been a more communicative child. It is concluded that the patient satisfaction is related to the harmonic esthetic restoration performed, but the prognosis and longevity of this case report is based on the relevant factors such as patient age, tooth structure, teeth eruption periods and functional occlusion.

135. Interference caused by a Dentin Desensitizer in the Formation of the Hybrid Layer - A S.E.M. Analysis

DOVIGO, L. N.*; CANDIDO, M. S. M.; JARDIM, P. S.; NOGUEIRA, I.; RICCI, H. A.

The evolution caused by the Adhesive Systems in the Odontology, led the development of simplified adhesive systems, however, the problem of postoperative sensitivity exists. Launched in the market recently, the GHF Desensitizer, objectives to prevent postoperative sensitivity when it's used in dentin before esthetic restorations, but the interference in the formation of the hybrid layer is unknown. This work evaluated the thickness of the hybrid layer formed by two adhesive systems in Sweepings Electronic Microscopy, with and without the application of the GHF, in bovine dentin. Forty teeth had been used, with exposed dentin surfaces, divided in four groups: GI- Adhesive System P&B 2.1 + Composed Resin; GII- GHF + Adhesive System P&B 2.1 + Composed Resin; GIII- Adhesive System MB + Composed Resin; GIV- GHF + Adhesive System MB + Composed Resin. After the hybrid analysis in SEM, layers had been measure (Digimess). The results had shown statistic significant difference in the thickness of the hybrid layer of the GI in comparison to the other groups, and the Groups II, III and IV had not presented difference between themselves (Analysis of Variance $p < 0.01$; and HSD Test of Tukey & #945;=0.01). Financial support CNPq.

137. Reestablishment of vertical dimension in a patient with bruxism followed by esthetic reconstruction of anterior teeth

BOAVENTURA, J. M. C.*; PAULILLO, L. A. M. S

The existence of parafunctional habits can lead to loss of occlusal vertical dimension, generating occlusal and facial disharmonies. In this case report, a male patient, 36 years-old, presented to the Clinics of Operative Dentistry, Piracicaba Dental School- UNICAMP, complaining about the wear of anterior teeth. Clinical examination revealed severe loss of occlusal vertical dimension due to bruxism. Study casts were related for treatment planning. Occlusal splint was made in acrylic resin for inferior molars (36 and 37) to diagnose the amount of loss of vertical dimension. Thus, vertical dimension was reestablished with composite resin on the inferior molars, providing space for esthetic reconstruction in the anterior teeth. Part of the treatment included supervised home bleaching and at the dental office. After color selection, a new set of models was obtained for diagnostic wax-up. A silicone index made from the diagnostic wax-up served as guide for the esthetic reconstruction of anterior teeth in composite resin. The final esthetic result was very satisfactory, demonstrating that this can be a simple way to reestablish harmony in the anterior esthetics.

134. The importance of occlusal adjustment

QUEIROZ, P. A.*; SILVA, M. R., ALMEIDA, G. A., SIMAMOTO JÚNIOR, P. C., SOARES, C. J., FERNANDES NETO, A. J.

Despite of the unquestionable improvements of Dentistry, the lack of occlusal equilibrium shows itself as a threat to stability and the success of the obtained results by the oral rehabilitations, with the capacity of promoting significant occlusal modifications from the pre-existent conditions of the patient. This usually occurs when the extensive prosthetic rehabilitations or orthodontic/orthopedic treatments are done, changing the relationship of the occlusal contacts and, therefore, the action of proprioceptors of periodontal ligament, although it does not always result in harmony between the muscular and articular dental-skeletal components of the stomatognathic system. Several works confirm the clinical and functional advantages of the occlusal adjustment after orthodontic treatment, such as: probable increase of the dental positionament stability, stabilization of root resorption wich is observed radiographically and possible moderation of the aching symptomatology in temporomandibular dysfunctional patients, when under occlusion condition influence. The aim of this work is to put in evidence the applicability of occlusal adjustment when properly indicated as a complementary therapeutic method to Orthodontic treatment, by means the report of 02 clinical cases realized in identical twin patients, searching for the optimization of esthetical functional aspects of the oral rehabilitation.

136. Marginal microleakage in enamel bovine teeth of class "V" cavity preparation varying the marginal morphology

GIORGETTI, A. P. O.*; CARLO, H. L.*; CANDIDO, M. S. M.

The purpose of this study was to evaluate the influence of the class V cavity preparation in enamel marginal microleakage using bovine teeth. Thirty incisors were distributed in 3 groups with a class V cavity preparation in each one (in the incisal wall of a group a bevel was made). Preparations were etched, the adhesive system Single Bond was applied and restored with a resin Filtek Z250; G1: Adhesive system (AS) + composed resin restoration (CR) over the cavity preparation (and same thickness of the bevel); G2: AS + CR until the limit of the cavosurface angle; G3: AS+ CR until the limit of the cavosurface angle of the bevel. The specimens were polished and thermocycled, stained, and sectioned to evaluate linear and penetrating microleakage. The results were evaluated in accordance with the degree of dye penetration in the incisal wall of the preparation varying from 0 to 4, where the 0 means no infiltration and 4 means leakage in the axial wall of the preparation. G1 = 9 scores level 0 and 1 score level 1; G2 = 7 scores level 0 and 3 scores level 1 and G3 = 2 scores level 0, 7 scores level 1 and 1 score level 4. The statistical Kruskal-Wallis test demonstrated significant difference ($p < 0.05$) between the groups G2 and G3. In none of the groups it was possible to eliminate marginal microleakage; the beveled preparation and the restoration over the cavity preparation significantly reduce microleakage.

138. Analyses of microhardness studies: a comparison between statistical methodologies

ALEXANDRE, R. S.; CAVALCANTI, A. N.; MITSUI, F. H. O.; LOVADINO, J. R.; MARCHI, G. M.; AMBROSANO, G. M. B.

The statistical analysis is fundamental in the planning, execution and discussion of experiment's results. The Analysis of Variance is one of the most used statistical methodologies in the dentistry area. However, the ANOVA model varies in function of the experiment planning, fact that can interfere on its conclusions. It is common to found researches with a Split Plot model being erroneously analyzed as a Factorial model. Thus, this work aimed to compare results of a composite resin microhardness experiment when analyzed by these two models of ANOVA. It was observed significant differences between tested groups with the Factorial model ($p=0.03$). However, when the appropriate analyze was performed, the split plot analysis, it was not found a significant difference between the groups ($p=0.16$). This can demonstrate that the choice of an incorrect statistical methodology can affect experiment's inferences. Thus, errors in conclusions could be significantly reduced with an adequate planning and with the right choice of the statistical test.

139. Clinical efficacy of LED's associated or not to Laser in the bleaching agent activation

LIMA, D. A. N. L.*; SILVA, A. L. F.; SILVA, A. B.; BUENO, V. C. P. S.; LOVADINO, J. R.

The in-office bleaching makes possible an immediate result and a smaller exhibition of the patient to the whitening agents, which, added to the professional total control of the technique, it has been an excellent option. The action mechanism of bleaching agents consists in a chemical oxo-reduction reaction, that can be accelerated by a light source or heat. Although the temperature increases favor a faster reaction this should be limited in order to avoid irreversible pulp damages. Specific sources of energy, like Laser's and LED's, are being enough used aiming an effective and safe bleaching. The association of these two sources provided the development of appliances that present two light units generators, a system of cold light emitted by LED's and medium potency Diode Laser system. This work reports a in-office bleaching clinical case which had the reaction potentiated by the use of Diode Laser associated to the LED's or just by LED's, in a total of four sessions. The oxygen release reaction occurred faster for the use of LED associated to Diode Laser than LED separately. This could be observed by the change in color of the bleaching gel (Whiteness HP-FGM). However, the amount of lightness obtained seemed the same for the two types of treatments. Also, the patient presented tooth sensitivity in all sessions, which appeared to have a cumulative effect.

141. Integrated planning and rehabilitation in patient with alteration of vertical dimension of occlusion in bruxism result.

SANTOS FILHO, P. C. F.*; SIMAMOTO JÚNIOR, P. C.; MOTA, A. S.; NEVES, F. D.; FERNANDES NETO, A. J.; SOARES, C. J.

The bruxism, parafunctional habit of multifactorial characteristics, happen in parcel of the population each bigger time occurring deleterious consequences to the dental structure. The success of the treatment of patients with this habit, depends directly on correct diagnosis, followed immediate of adequate treatment. This work has for objective to demonstrate through clinical case, the sequence of the aesthetic and functional rehabilitation of bruxism patient: fifty years, of the masculine sex with deep alterations of the anterior dental structures represented for dental consuming with loss of 2/3 of the crown of the central and laterals incisors and 1/3 of the crown of the canine. After the verification of alterations with vertical dimension of occlusion, the same one was returning with the use of "overlays", for posterior aesthetic and functional rehabilitation, direct using association of intra-radicular posts and direct restoratives in the anterior teeth, and indirect with restoratives of metal-ceramics in the posterior teeth. Ahead of the physiological comfort, functional and aesthetic reached with the conclusion of the treatment, it was evident the satisfaction and well-being of the patient.

143. Analysis of the superficial microhardness of different materials indicated for restoring treatment atraumatic.

PADOVANI, G. C.*; CANDIDO, M. S. M.; MACHADO, J. S.; ESBERARD, R. R.; PADOVANI, G. C.

The objective of this work was to evaluate the superficial microhardness of five Glass Ionomers Cements (Molar Ketac; Fuji IX; Molar Vitro; Bioglass R; Vidrion R), indicated for the technique of Atraumatic Restoration Treatment (A.R.T.), having a microhybrid Composed Resin (Z250) as control. It was gotten ten body-of-test of each tested material, stored in heater by 37°C, isolated in way that the form properties were not modified by the humidity. The analysis of the microhardness occurred after 24 hours and 7 days of the initial reaction. After 24 hours, the body-of-test 3 (three) readings of microhardness was made in each one of body-of-test, totalizing 12 (twelve) measures, being the measures transformed into Vickers Hardness averages. With exception of Group III (Fuji IX), which, did not get a significant increase in the superficial hardness in the initial and end period, all the tested Groups had a resembling average. The results displayed that tested materials had presented inferior superficial hardness to the Control Group (Z250), however, they had scientific evidences these cements have similar hardness between themselves in the initial as the end period.

140. Statistical results on dentistry experiments: effect of the interaction between factors

CAVALCANTI A. N.; TERRA E. R.; SILVA, A. P. B.; HAITERNETO F.; MARCHI G. M.; AMBROSANO G. M. B.

The statistical analysis interpretation is a critical field for researches, including dentistry ones. When there is more than one factor being studied, their interaction is fundamental on result's discussion. However, some doubts can occur when the p-value of the interaction is near from 0.05. Thus, this study evaluated ANOVA interaction's values found in dentistry studies: one from restorative dentistry area (p-value=0.054) and other from radiology area (p-value=0.06). Two techniques were used – without developing and developing the interaction. In the dentistry study, when the interaction was considered nonsignificant there was not a significant difference between the groups at the two times tested. However, with the second form of analysis, one group presented statistical significance at one time. Also, in the radiology experiment, differences were observed between both analysis, and the results changed when the interaction was considered significant. Both analyses presented more coherent results after interaction development. Thus, it was noted that the careful interpretation of statistical results is fundamental for the appropriated discussion of an experiment.

142. Variability of fluoride releasing from restorative materials

PARDI, V.*; AMBROSANO, G. M. B.; PEREIRA, A. C.; MENEHIM, M. C.; REIS, A. F.; GIANINNI, M.

The aim of this study was to evaluate the variability and the coefficient of variation (CV) of dental experiments where the variable studied was the fluoride releasing of restorative materials. A PubMed search was performed for articles that evaluated fluoride release of dental restorative materials (1981-2003). All papers were completely read, totaling 111 experiments. Data of each experiment were tabulated using Excel software. The normality of the data was tested by Shapiro Wilk test ($\alpha=0.05$), using the statistical package software SAS V8.2. Values of CV were calculated using the relation between the mean and the standard deviation. The analysis allowed the classification of the CV values according to the studied variable as low, medium and high. When the unit was volume, it was classified as low in cases where $CV \leq 6.93$; medium, $6.93 < CV \leq 40.33$; high, $40.33 < CV \leq 57.03$; and very high, $CV > 57.03$; whereas to the area unit, the values transformed in log were: $CV \leq 2.14$; $2.14 < CV \leq 3.44$; $3.44 < CV \leq 4.09$ and $CV > 4.09$, respectively.

144. Analyze in Size and Shape of the particles composites resins

QUEIROZ, R. S.*; PORTO, T. S.; ROPERTO, R. C.; ALVIM, H. H.; CARLO, H. L.; PORTO-NETO, S. T.

The growing technological advance as seen in industry today has provided an enormous range of resinous composites available on the market. Nevertheless, the characteristics in its composition, mainly concerning the size and shape of the load particles, as well as the different types of resinous matrices, are distinct, leading to different physical and mechanical properties. This fact has led to the execution of this work which aims to evaluate the shape, distribution and size of the composite particles with different types of resinous matrices (macroparticles, micro-hybrid, condensable and nanoparticles). With a spatula, the samples of each resin were placed in the center of a glass lamina where the organic matrix dissolution was made possible by adding an organic solvent (acetone), so as to cause the total separation of the organic phase and the exhibition of the inorganic particles. The specimens were metallized and then brought to an electron microscope for the surface scanning, allowing, therefore, the analysis and the recording of the particles through photomicrographs. The results expressed different means of distribution and kinds of inorganic particles, despite the composite type. The authors have concluded that the composites show particles of different shapes and sizes, which, however, do not usually match the classification given by the literature.

145. The relationship between different experimental methods: stress distribution in FEA, modes of fracture and fracture strength.

FONSECA, R. B.*; FERNANDES-NETO, A. J.; CORRER-SOBRINHO, L.; SOARES, C. J.

This study aimed to evaluate the relationship between stress distribution by Finite Elements Analysis, modes of fracture and fracture strength of posterior teeth restored with ceromer, and the influence of different cavity preparations on these methods. Ninety molars were divided into 9 groups: 1) Intact teeth; 2) Conservative inlay; 3) Extensive inlay; 4) Conservative occlusal isthmus (C) onlay with MB cusp coverage; 5) extensive occlusal isthmus (E) onlay with MB cusp coverage; 6) onlay (C) with buccal cups coverage; 7) onlay (O) with buccal cups coverage; 8) overlay (C); 9) overlay (E). Prepared teeth were restored with a ceromer material, Targis (n=10). The teeth were submitted to an ultimate compressive strength test on a testing machine, at a crosshead speed of 0,5mm/min. The modes of fractures were classified according to five levels of tooth final damage. ANOVA ($\alpha=0,05$) following Tukey test show failed to show differences among all groups of prepared teeth, but showed differences between prepared teeth and control group ($P=0,000$). Two-way ANOVA also failed to show any particular difference when considering the occlusal isthmus width alone ($P=0,980$) or cuspal coverage ($P=0,273$), or even the interaction between these factors ($P=0,972$). A great number of teeth had a harmful mode of fracture, which extended till the biological width. The absence of differences on fracture resistance among prepared teeth and their fracture modes clear show that it seems not to be necessary cuspal coverage when tooth preparations are similar to the ones of this study. The modes of fracture showed a clear relationship with stress distribution by FEA.

147. Evaluation of apical leakage of endodontic sealers and coronal leakage of adhesive and composite sealing.

NICASTRO, K. S. M.*; CORTEZ, D. G. N.; MATHEUS, R.; FERREIRA, F.; BOER, M. C.

This "in vitro" study evaluated the apical seal obtained by 3 endodontic sealers and the influence of a plug of temporary material in coronal seal accomplished with adhesive and composite. Thirty four roots with a single canal were used, divided in 3 groups of 10 and the controls. After the instrumentation and the foramen standardization, the canals were filled by lateral condensation with the sealers: Endofill, Pulp Canal Sealer and Target HD. In 5 roots of each group 3mm of the fillings were removed with Gates-Glidden # 4. In the other ones, 4mm were removed and a plug of 1mm of Coltosol was accomplished. All the specimens received the coronal seal with adhesive Single Bond and Z-250 composite. After the ink action they were fractured longitudinally and the leakage was measured with glass magnifying and digital paquimeter. The results were statistically analyzed demonstrating greater apical leakage by Endofill ($p < 0,05$) in relation to Pulp Canal Sealer that did not present difference with Target HD. Evaluating the coronal seal, the comparisons inside the same group, the plug did not improve the sealing, however, when it was accomplished, Target HD sealer seal better than Endofill ($p < 0,05$). Endofill presented inferior seal to the others tested and the interference of the Coltosol plug favored the coronal seal with adhesive system and composite in Target HD sealer.

149. Effect of different bleaching agents on the surface morphology of bovine dentin

LAURINDO, A. C. L.*; SANTOS, J. N.; OLIVEIRA, D. P.; DAMETTO, F. R.; FERRAZ, C. C. R.; ZAIA, A. A.; GOMES, B. P. F. A.; SOUZA-FILHO, F. J.

The aim of this study was to evaluate the effects of some materials used for non-vital bleaching on surface morphology of pulp chamber dentin. Forty dentin fragments were obtained from bovine incisors' pulp chamber and distributed among 5 experimental groups and 3 control groups. Specimens (n=5) were immersed in the bleaching agents and stored at 37°C for 7 days. The following materials were employed: sodium perborate and distilled water; sodium perborate and 2% chlorhexidine gluconate in a gel base; sodium perborate and 30% hydrogen peroxide; 30% hydrogen peroxide; 10% carbamide peroxide; and control groups with distilled water; 2% chlorhexidine gluconate in a gel base and the base without carbamide. After seven days, specimens were removed from the bleaching agents and prepared for SEM evaluation. The images obtained were scored from 0 to 2, according to alteration levels. Hydrogen peroxide caused more severe morphological changes on dentin surface, while other solutions caused only smooth alterations. Thus, it was concluded that bleaching agents can adversely affect dentin surface morphology and should therefore be used carefully. Support: CAPES/FAPESP.

146. In vitro analysis of the microleakage in some temporary sealing materials.

ERENO, C.*; OLIVEIRA, E. C. G.; SHINOHARA, A. L.; DUARTE, M. A. H.; WECKWERTH, P. H.; YAMASHITA, J. C.

The in vitro micro leakage of 4 temporary sealing materials was studied: Dentalville, IRM, Bioplic and Vitremer. 70 crows of human anterior teeth were used. Access cavity was implemented. Nest, 5 groups of 14 crows were subdivided in 2 groups of 7, 1 control group. Each subgroup was related to the cepa of microorganism (*S.aureus* and *C. albicans*). A system for microbiological study was prepared, with 2 glass tubes and a punctured rubber lid. The lid was fit between the tubes in their openings. The crown was fixed in the lid puncturation and space between it and the lid was sealed. The tubes and the BHI liquid were sterilized and the lids with the crows were sterilized with ethylene oxide. In the inferior glass tube the BHI liquid was introduced and the rubber lid was fit with the fixed crown. The materials incrementation was implemented under layer flow. In the superior tube the cepa that was in contact with the restored crown was introduced. After, they were stored at 37 and observed for 14 days to check the turvation occurrency of the BHI liquid. Based on the chi square test there was no significant differences between the groups. However, the IRM presented a higher microleakage and the materials can be grouped in microleakage decreasing order: IRM, Vitremer, Bioplic and Dentalville.

148. Coronal microleakage of endodontically treated teeth using different irrigant solutions

DELBONI, M. G.*; GOMES, B. P. F. A.; VIANNA, M. E.; FERRAZ, C. C. R.; ZAIA, A. A.; SOUZA-FILHO, F. J.

The aim of this study was to evaluate the influence of different irrigation protocols on the sealing quality of the root canal. One hundred single-root human extracted teeth were prepared, filled and randomly divided into 10 groups. Each group (n=10) was irrigated using the following solutions: I: 2,5 % NaOCl; II: 17 % EDTA; III: 2 % chlorhexidine gel; IV: sterile saline; V: H2O2; VI: 2,5 % NaOCl + 17 % EDTA; VII: 2,5 % NaOCl + 2 % chlorhexidine gel; VIII: 2,5 % NaOCl + Ca(OH)2 (7 days) + 2 % chlorhexidine gel; IX: 2,5 % NaOCl + 10 % H2O2 + 2 % chlorhexidine gel; X: 2 % chlorhexidine gel + 17 % EDTA. After root canal filling, the teeth were incubated at 37°C for 10 days for complete sealer set, followed by 10 days of immersion in Indian ink. The teeth were cleared and maximum dye penetration was digitally measured. Statistical analysis was carried out using the Kruskal-Wallis test. The results demonstrated variable leakage patterns in all groups. NaOCl + EDTA had the lowest leakage mean without significant difference among the groups III and X. Groups VII, I, V and IV showed extensive dye penetration. In conclusion, different irrigation solutions influenced coronal microleakage. Irrigating methods, such as NaOCl + EDTA or chlorhexidine gel + EDTA, promoted better root canal sealing. FAPESP (00/13689-7), CNPq (304282/2003-0)

150. Birefringence variations of dentin collagen treated with different endodontic irrigant solutions

MOREIRA, D. M.*; LINE, S. R. P.; GOMES, B. P. F. A.; FERRAZ, C. C. R.; ZAIA, A. A.

Birefringence consists in anisotropic propertie caused by the difference in the refraction index of an object. One of the applications of the birefringence research is solving problems of organization and physiology of the collagen fibers. Alterations on collagen structure can induce interferences in adhesion between dentin and restorative materials. This study evaluated the alterations on the collagen birefringence after treatment with different endodontic irrigant solutions. 60 bovine incisors were divided in 6 groups: Group I – 5,25% NaOCl + 17% EDTA, group II – 2% Chlorhexidine Gel, group III – 5,25% NaOCl, group IV – 17% EDTA, group V – 2% Chlorhexidine Gel + 17% EDTA, group VI – saline. The samples had their crowns cut, their dental pulps extirpated and were irrigated in accordance with the group they belonged, using a total volume of 10ml for each sample except for the 2% chlorhexidine gel groups, in which 2ml of total volume for each sample was used. After the instrumentation, the irrigant solutions were maintained for 45 minutes in the root canal, except for 17% EDTA groups which were maintained for 15 minutes. The samples were evaluated through the polarization microscopy. The results demonstrated birefringence alterations on the groups I and III. According this, it can be observed the occurrence of possible variations in the structure of the collagen organization.

151. Histomorfometric analysis of the remainder dentin after cervical root prepare with Gates Glidden burns.

MOURA, C. C. G, NEVES, J. S*, VIEIRA, A. E., DECHICHI, P.

The aim of this study was to achieve histomorfometric analyse of the dentin thickness of the distal wall of root MV of the 1^o mandibular molar after using Gates Glidden 1,2,3 burns. 20 canal root MV had been instrumented in the crown-down direction with Kerr file n^o 35-30-25-20-15 (Technique of modified Oregon). After the instrumentation, the teeth had been divided in 2 groups: control (c) and experimental (E). The teeth of control group had not after received no treatment after instrumentation. MV root of group E was prepared with Gates Glidden burns 1,2,3. After that, the teeth had been descalcified in acid nitric 5% and had soon had its separate mesial root below of furcation. The average and apical third of the root had been discarded. The segments of the roots had been processed for inclusion in paraffin, getting themselves perpendicular cuts to the cervical region. The cuts with 5µm of thickness had been stained with Mallory Tricromic and analyzed to the light Microscopy. By means of the HL Image Program, 200 measures of distal wall of canal MV was obtained in each group. The analysis statistics of the data (t-Student test, p<0,0001) it showed to significant difference of dentin thickness between groups C (0,783µm) and E (0,389µm). The results indicate that the use of Gates Glidden burns promotes significant wear in the distal wall of MV canal root of 1^o mandibular molar reducing the remainder dentin .

153. Antimicrobial action of chlorhexidine and sodium hypochlorite in contact with single-biofilms-in vitro

SENA, N. T.*, GOMES, B. P. F. A., BERBER, V. B., VIANNA, M. E., ZAIA, A. A., FERRAZ, C. C. R., SOUZA-FILHO, F. J

The aim of this study was to investigate the antimicrobial activity of 2% chlorhexidine gel and liquid and 2.5% and 5.25% sodium hypochlorite as endodontic irrigant against select single-species biofilms. *Enterococcus faecalis*, *Candida albicans*, *Staphylococcus aureus*, *Prevotella intermedia*, *Porphyromonas gingivalis*, *Porphyromonas endodontalis*, and *Fusobacterium nucleatum* were grown on cellulose nitrate membrane on agar medium, generating single biofilms, and subjected individually to 30s and 5,10,15,30 and 60 min with or without agitation. Sterile saline were used as control. After the timing tested, each biofilm was transferred to liquid media plus irrigants neutralizers and vortexed to suspend the microorganisms. The bacterial suspensions were serially diluted in reduced broth media, plated on 5%sheep blood agar medium, incubated under specific gaseous and colony-forming units calculated. The 5.25%NaOCl killed all microorganisms under the period of 30s, chlorhexidine liquid 2% eliminated in 5 min and chlorhexidine gel 2% in 30 min. The agitation groups were more effective than the group without agitation. However, the effectiveness of the irrigants was dependent on the microorganism present in the biofilm and on the timing that the irrigants were in contact with them. Supported by FAPESP (00/13689-7) & CNPq (304282/2003-00)

155. The Importance of the Traumatic Dental Injuries Center, Dental School of Piracicaba, forward dental avulsion

LUVIZOTTO, L. D*, SOARES, A. J, GOMES, B. P. F. A., ZAIA, A. A.; FERRAZ, C. C. R.; SOUZA-FILHO, F. J.

Daily, a considerable number of individuals is undertaken by traumatic dental injuries due to different types of accidents. These injuries can compromise both support structures and teeth properly. Children are usually the most affected population in this concern. Avulsion is one of the severest injuries without prompt emergency treatment is usually uncertain. Therefore, the aim of the present was evaluated the significance of the Traumatic Dental Injuries Center, Dental School of Piracicaba, State University of Campinas, Piracicaba, SP, forward the dental avulsion between 2002 and 2003. This study evaluated 71 patients (59% males and 41% females) included the 7-50 year-old group patients and 152 teeth examined. Results revealed that the relation in the year-old group were: 43,66% (<=14 anos), 45,07% (15-25 anos) e 11,27% (<=26 anos) and .showed also that 73 teeth were lost and 79 reimplanted and did not show statistically significant differences among the teeth avulsed with the evaluated years (p<0.05/ chi-square). Based on these findings, it was concluded that because of the high occurrence of avused dental, the a specialized assistance as that developed by the Center becomes really important.

CNPq: 304282/003-0/Fapesp: (00/13689-7).

152. Primary endodontic infections- Bacteriologic study

JACINTO, R. C.; GOMES, B. P. F. A.; TCHEOU, C.; FERRAZ, C. C. R.; ZAIA, A. A.; SOUZA-FILHO, F. J.

Primary endodontic infections are generally caused by microorganisms which inhabit the root canal environment in mixed infections dominated by anaerobic bacteria. Objectives: The aim of this study was to analyse the microflora isolated from infected root canals of symptomatic or asymptomatic teeth, with periapical radiolucent areas. Methods: Microbial samples were taken from root canals of 90 teeth with necrotic dental pulp. Strict anaerobic techniques were used for serial dilution, plating and incubation. Microbial colonies were then purified, characterized and identified by established methods The clinical aspects of each case were observed: spontaneous pain (n=54), tenderness to percussion (n=58), pain on palpation (43), caries (n=45), swelling (n=33), exudate (n=40), abscess (n=56), absence of symptomatology (n=20). Results: A total of 400 cultivable isolates were recovered from 69 different microbial species and 22 different genera. Root canals from symptomatic teeth harboured more obligate anaerobes and a bigger number of bacterial species than the asymptomatic teeth. About 80% of the total bacterial isolates were strict anaerobes. The most frequently found strict anaerobes were: *Fusobacterium nucleatum* (n=35), *Prevotella intermedia* (n=21), *Anaerococcus prevotii* (n=19), *Prevotella oralis* (n=19), *Peptostreptococcus micros* (n=18), *Fusobacterium necrophorum* (n=16), *Veillonella* spp. (n=16), *Eggertella lenta* (n=12), *Porphyromonas gingivalis* (n=11). 'Black pigmented bacteria' were found in 45% of the root canals analysed. Statistical analysis used a Pearson x2 test or a one-sided Fisher's Exact test, as appropriate. Conclusions: Our results suggested that specific bacteria are associated with endodontic symptoms of infected teeth. Moreover, the majority of the bacteria associated with symptomatology was the strict anaerobes. (Supported by FAPESP 00/13689-7, 02/08167-7; CNPq- 520277/99-6 & CAPES - BEX 2528/02-9)

154. Evaluation antimicrobial activity and pH of intracanal medicaments to be used in traumatized teeth

SOARES, A. J*, VIANNA, M. E., GOMES, B. P. F. A., ZAIA, A. A.; FERRAZ, C. C. R.; SOUZA-FILHO, F. J

Calcium hydroxide was one of the first substances used as intracanal medicament. In the area of dental trauma, it has been advocated as a temporary dressing, specially in replanted teeth and luxation in an attempt to prevent or inhibit inflammatory resorption. The aim of this study was to evaluate the effectiveness of 2% chlorhexidine gluconate gel(2%CLG), calcium hydroxide(Ca(OH)₂), 2%CLG+ Ca(OH)₂ and its association with iodoform and zinc oxide powder, as intracanal medicament, against some microorganisms and also the evaluation of the pH. The antimicrobial activity was determined by the agar diffusion method. Zones of inhibition of microbial growth were measured and recorded after the incubation period and six replicates were made for each microorganism. The pH of the pastes were measured just manipulation, 24 hours and 7 days later using the pH meter. The data were statistically analysed (Kruskal-Wallis test) and 2%CLG showed the higher antimicrobial activity. The in vitro antimicrobial effects were ranked from strongest to weakest as follows: 2%CLG; 2%CLG+Ca(OH)₂; 2%CLG+ Ca(OH)₂+ iodoform; 2%CLG+Ca(OH)₂+ zinc oxide; Ca(OH)₂+sterile water. The microbial susceptibility were ranked in decreased order as follows: *S.mutans*, *S.sobrinus*, *P.intermedia*, *P.gingivalis*, *S.sanguis*, *C.albicans*, *E.faecalis*, *B.subtilis*, *E.coli*. The average pH of all the medicaments stayed above 12.0 during all experiment.

156. Enterococcus faecalis intracanal reduction by Hero 642 association rotatory technique and irrigants.

BERBER, V. B.; GOMES, B. P. F. A.; MENINI, M. O.*, ZAIA, A. A.; SOUZA-FILHO, F. J.

The irrigation is the most important procedures in the elimination of intracanal microorganisms. With instrumentation techniques, the irrigation contribute for endodontic therapy success. The purpose of this study was to compare the bacterium reduction made by rotatory instrumentation (Hero 642) and irrigants. Pré-molars contaminated for 21 days on *Enterococcus faecalis* monoculture, were prepared in accord the manufacturer technique for straight canals in association with different irrigants (2% liquid and gel chlorhexidine; 0,5%, 2,5%, 5,25% sodium hypo chlorite and sterile saline solution – control). The samples were collected before and after instrumentation. They were diluted and included in BHI Agar. The colonies were counted. All the tested solution reduced the number of bacterium cells in the canals, so all the samples were more efficient than the control. Through this results, we concluded the great importance of auxiliary chemical substance in the endodontic therapy.

157. E.faecalis reduction within root canals and dentinal tubules in vitro.

BERBER, V. B*.; GOMES, B.P.F.A.; SENA, N.T.; VIANNA, M. E.; FERRAZ, C. C. R.; ZAIA, A. A.; SOUZA-FILHO, F. J.

The aim of this study was to evaluate the efficacy of 0,5%, 2,5% and 5,25% NaOCl as intracanal irrigant associated with 3 instrumentation techniques against *Enterococcus faecalis* within root canals and dentinal tubules.

One hundred and eighty mandibular premolars were infected in vitro for 21 days with *E.faecalis*. The groups: Group 1: 5,25%NaOCl + Hybrid technique; Group 2: 5,25% NaOCl + NiTi rotary technique 4 mm shorter than the apex (By FOP-Unicamp) ; Group 3: 5, 25% NaOCl + NiTi rotary technique Hero 642 (commended by the manufacturer); Group 4: 2,5% NaOCl + Hybrid technique; Group 5: 2,5% NaOCl + NiTi rotary technique 4 mm shorter than the apex; Group 6: 2,5% NaOCl + NiTi rotary technique Hero 642; Group 7: 0,5%NaOCl + Hybrid technique; Group 8: 0,5% NaOCl + NiTi rotary technique 4 mm shorter than the apex; Group 9: 0,5% NaOCl + NiTi rotary technique Hero 642; Group 10: saline + Hybrid technique; Group 11: saline+ NiTi rotary technique 4 mm shorter than the apex; Group 12: saline + NiTi rotary technique Hero 642. Canals were sampled before and after preparation. After serial dilution, samples were plated, and the colony forming units (CFU) were counted. The teeth were sectioned in thirds and dentine chips were removed from the canals with conic burs. The samples obtained were collected in tubes containing BHI. The tubes were incubated at 37°C and plated. The CFU were counted and analyzed. NaOCl 5,25% was significantly more effective than NaOCl 0,5% in instrumentation techniques and dentinal depths tested ($p < 0.05$). This study shows the necessity of an effective substance to eliminate microorganisms within root canal and dentinal tubules during endodontic treatment. (Supported by Fapesp:02/12464-7; Fapesp:00/136897, CNPq:304282/2003-0)

159. In vitro evaluation of coronal marginal leakage of two composite resins in endodontically treated teeth

SAUÁIA, T. S.*; RABANG, H. R. C.; GOMES, B. P. F. A.; FERRAZ, C. C. R.; ZAIA, A. A.; SOUZA-FILHO, F. J.

The aim of the study was evaluate in vitro the length of time for the bacterial present in human saliva to penetrate in coronally sealing and standardized length of obturated root canals. Fifty single-rooted pre-molars teeth were utilized and divided in four experimental groups with 20 teeth each as well as one positive group and one negative group with 5 teeth. The root canals were prepared with a modified hybrid technique and obturated with a lateral condensed technique. The teeth was coronally sealed with composite resin Z-100 and Fill Magic. Human saliva was added in broth culture, placed in the access opening, and stored in the humidior at 37°C during 30 days. Turbidity of the broth was an indication of bacterial growth resulting from the penetration of saliva human through the root canal system. The data was submitted to statistical analysis by the Kruskal-Wallis non-parametric test. The statistical analysis showed that minimum time of leakage was 8 days. In 30 days the composite resin Fill Magic showed less leakage. (Supported by FAPESP (00/13689-7& CNPq 304282/2003-0)

161. Labour Dentistry: A new speciality in Dentistry

QUELUZ, D. P.*

To promote, protect and recover the worker's healthy guaranteed actions health for the Law 8080/90. The aim of this study was to present the new speciality: Labour Dentistry and the context in which it should be applied. The CFO-25/2002 Resolution establishes the competence areas for the specialists' performance in Labour Dentistry in Art. 3o that include: a) identification, evaluation and surveillance of the environmental factors that constitute risk to the buccal health in the work place, in any of the phases of the production process; technical b) advise and attention as regards to health, safety, ergonomics and hygiene in the work, as well as regards to e protection individual equipments, understanding each other inserted in the health team of the effective work; c) planning and implantation of campaigns and programs of permanent duration for the workers' education with relationship to you alter of work, occupational diseases and health education; d) to organize disease statistics and mortality with buccal cause and to investigate your possible relationships with the activities works; e) accomplishment of dental exams for labor ends. The conclusion is important developed research to ratify the need of this new speciality.

158. Clinical evaluation of two different treatments of irreversible pulpitis cases – preliminary data

SUMMA FILHO, F.; MENINI, M. O.; GOMES, B. P. F. A.; FERRAZ, C. C. R.; SOUZA FILHO, F. J.; ZAIA, A. A.;

The purpose of this study was to evaluate two different treatments of irreversible pulpitis, a major cause of orofacial pain. Data were collected from 40 patients with irreversible pulpitis in permanent molar teeth treated on emergency service of Dental school of Piracicaba. The patients were randomly separated in two groups with 20 patients each one. One of the groups was treated with pulpotomy. The other one was treated with endodontic instrumentation of 2/3 dental root length. After 24 hours the patients were asked by telephone about their pain. Patients that related pain by phone after 24 hours, were invited to return for a new clinical evaluation and anamneses. It was not found pain occurrences on phone reevaluation with 100% of success rates on both techniques employed. Despite the small sample, it was possible to notice that both techniques can be indicated in emergency treatment for pain associate with irreversible pulpitis.

160. The interdisciplinary importance (Endodontics, Dentistry/Periodontics) of traumatized teeth: description of a clinical case

ZENLY N. K.*; SOARES, A. J., GOMES, B. P. F. A., ZAIA, A. A., FERRAZ, C. C. R. SOUZA-FILHO, F. J

While considering the cases of dental trauma it is of great importance the interaction between the many specialties as to provide the most adequate treatment. Restorative dentistry as well as Periodontics are areas which are commonly combined to Endodontics when it is necessary to reconstruct fractured elements. Description of a clinical case: The patient C.C., 16 years old, suffered a bicycle fall, and the elements 11 and 21 were avulsed and reimplanted after approximately one hour. The patient seeked the Center of Dental Trauma of the University of Dentistry of Piracicaba-UNICAMP, Area of Endodontics, 3 months after the reimplante. Clinically was observed a semi-rigid contention with presenting great mobility. Radiography revealed suggestive images of internal and external resorptions. Initially, the treatment proposed was the intracanal exchange of medication. After six months the patient was directed to the clinic of Periodontics and Dentistry where the suggested treatments were the extraction of the elements and the confection of a prothese. The extracted elements were also observed under scanning electron microscopy to better document the case. It is possible to conclude that the multidisciplinary interaction is of great importance for a correct treatment planning

162. Evaluation of a method of self-instruction used for attainment of adequate levels of buccal hygiene in pertaining to school.

NOGUEIRA, I.*; GARCIA, P. P. N. S.; CAMPOS, J. A. D. B.; DOVIGO, L. N.

The objective of this study was to verify the effect of a method of self-instruction (comics) on the buccal hygiene of pertaining to school applied with different approaches, evaluated in two periods. The sample was composed of 60 pupils of basic education, grouped in three groups: control group (G1) that some did not receive material, reading group (G2) which it received the comics and it was read in classroom, quarrel group (G3) that received the comics and its content was read and argued. The index of plate of O'Leary was used as evaluation instrument, measured before the program and 30 days after. First, analysis was carried through descriptive statistics of the data and after that, the groups and the periods had been compared by means of Test $t < 5\%$, with the aid of SPSS program. The results of the evaluation had demonstrated a significant reduction of the index of plate presented between the two periods, in the three studied groups. However, despite this, the fall in the percentage of the plate index was bigger in the G3 group (47,81%), which presented significant difference in comparison of groups G1 (21,82%) and G2 (27,50%). Financial support CNPq.

163. Evidence-based education: do you know what is it?

PORTO, C. D.*; MARCHINI, L.

The work intend to clarify, through literature review, what is evidence-based education and which is its importance. The evidence-based education has great relevance, but is little known by the health area professionals in Brazil. It is a methodical process that allows to search the best solutions for the clinical problems, through of trustworthy scientific information. Many science discoveries will can to bring changes in certain protocols of attendance, allowing techniques or behaviors whose effectiveness be greater. However, it is necessary to analyze the validity, importance and applicability of these new proposals, before choose a new behavior. Currently, we can count with initiatives as Cochrane, that provides systematic literature reviews, and have the evidence-based education as main proposal. The adoption of the evidence-based education in the dentistry graduation in Brazil seems to be adjusted to give bigger scientific basement to the practical clinics. It also seems to propitiate to the surgeon-dentist an useful tool to remain itself brought up to date with the scientific advances, which characterize the current society of the information, in a globalized world.

164. Interactions between the ethyl alcohol and medicines of odontological use

TAMINATO, R. L.*; MOREIRA, A.; PINHEIRO, M. L. P.; ANDRADE, E. D.

The medicines interaction concerns the possibility of a drug to alter the intensity of the effects of another drug used together. The drugs can be used in association to obtain the wanted therapeutic objective and, in a lot of occasions, that is fundamental for the success of the treatment. However, not always the drugs interactions are beneficial, could produce from inactivation and alterations in the absorption of the medicine - with consequent decrease of your action - or even producing toxicant effects and, in some cases, even lethal. The individual habits need to be analyzed before the prescription of the drug. The ethyl alcohol, for instance, when associated to the medicines used in the odontological clinic it can provoke important clinical effects such as: increase of the depressive effect of the Central nervous system, what happens when associated to the benzodiazepine or local anesthetics, action decrease or toxicity, when associated the some antibiotics and analgesic. The objective of this work is to alert the surgeon-dentist with relationship to the interactions between the ethyl alcohol and some drugs of odontological use, so that it can adopt alternative conducts of treatment.

165. Preemptive analgesia in dentistry

PINHEIRO, M. L. P. *, TAMINATO, R. L., MOREIRA A., ANDRADE, E. D.

In more invasive dental procedures, the inflammatory pain is the most important component in response to tissue injury. Preemptive analgesia, an evolving clinical concept, involves the introduction of an analgesic regimen before the onset of noxious stimuli, with the goal of preventing sensitization of the CNS (hyperalgesia) to subsequent stimuli that could amplify pain. This strategy is believed to reduce the amount of necessary analgesic medication for the control of postoperative pain, as well as to decrease the time of recovery of the patient, providing the patient with comfort. The adoption of this method as a standard clinical practice has been delayed by controversy over whether the pharmacological intervention should be administered before the surgical event (preemptive analgesia), before pain onset (preventive analgesia), or by repeat administration over the expected postoperative course. Several drugs, such as the nonsteroidal anti-inflammatory drugs (NSAID), local anesthetics, opioids or even a combination of them, have been used to promote preemptive analgesia. This study aims at proposing a protocol of preemptive analgesia in dentistry using the bupivacaine as a local anesthetic and the corticosteroids of long duration of action, due to its greater anti-inflammatory power.

166. How to calculate the recommended maximum doses of local anesthetic solutions?

NAKAYOSHI, A.; IANNER, K. M.; BRANCO, F. P.; VOLPATO, M. C.

All drugs can produce superdosage signals when administered an over dose. It is impossible know exactly the doses or blood concentration of drug that causes clinical effects. The biological variability has a great influence in the responses. The recommended maximum doses of parenteral drugs, like local anesthetics, must be calculated considering the age, physical state and weight of each patient. Local anesthetics dosage are expressed in milligrams/kilograms and vasoconstrictors dosages in milligrams. The aim of this study was to describe the recommended maximum doses of local anesthetics and vasoconstrictors utilized in Brazil, to demonstrate how calculate the individual dosages and to describe the superdosage reactions after anesthetic solution injection.

167. Normal response values after electric stimulus

IANNER, K. M.*; NAKAYOSHI, A.; BRANCO, F. P.; VOLPATO, M. C.

Dental pulp stimulation with electric pulp tester does not cause histological injury and is a viable and useful method to research local anesthetic. Vitality Scanner model 2006 (Analytic Technology, Redmond, EUA) pulp tester, utilized in this study, has a control unit that produce an electric stimulus and an electrode to transmit it. Volunteers were instructed to inform when some sensibility occurs. The aim of this study was to establish a normal interval of values to inferior canine, second premolar and second molar of 30 volunteers. The teeth were tested 6 times, every 2 min, by means of a pulp tester to determine baseline vitality. Results showed that the media were similar, however, interval between the maximum and minimum values were elevated, especially to second molar.

168. Hyperbaric oxygen therapy (HBO): implications in dentistry

MARTINS FILHO, S. R. C.*; CASTRO, L. H. G.; L'ASTORINA, C.

Hyperbaric Oxygen Treatment (HBO) is the administration of pure oxygen under a higher atmospheric pressure. The hyperbaric oxygen treatment increase the blood absorption of the oxygen and results in a partial high pressure of oxygen, affecting the oxygen tension in a regeneration tissue. The introduction of the use of the hyperbaric oxygen treatment allowed great advance in the treatment of osteoradionecrosis and osteomyelitis, allowing safer surgery interventions, as bone extractions and reconstructions, in patients under radiotherapy, and still providing bone neoformation in grafted areas. This study aimed to review the literature and evidence the clinical implications of HBO in Dentistry. Clinical studies in hyperbaric centers worldwide indicate a 60% to 90% rate of complete healing of chronic refractory osteomyelitis anywhere in the body. The positive effect of hyperbaric therapy in irradiated patients is probably based in the higher oxygenation of the tissue, hipoxed before, from the lower vascularization caused by irradiation. The objective of HBO treatment in non healing tissues is to provate granulated tissue formation, neovascularization and epitheliazation. The therapy have been used extensively for these purposes. The use of HBO in Dentistry has been indicated in cases which a fast and effective tissue repairing is needed.

169. Biopsy of the oral mucous in the verification of the success of the bone marrow transplantation

DEVIDES*, N. J.; SOUZA-SILVA, G.H.; BORTOLOCCI, A. G. J.; BUZZÁ, E. P.; TOLEDO NETO, J. L.

Leukemia is a disease characterized by neoplastic alterations of the blood cells. The most usual signs and symptoms are anemia, thrombocytopenia, leukocytosis, fatigue, indisposition and fever. All kinds of leukemia are treated with chemotherapy and, in determined cases, with bone marrow transplantation. The dentist may have an important role in the diagnostic of the disease, checking signs like hyperplasias and gingival bleeding and uncontrolled and recurrent infections, and lymphadenopathy. In the occurrence of the diagnosed disease, it is the dentist duty to overcome focus of the infections of the mouth and to keep adequate oral hygiene, previously the chemotherapy and during the bone marrow transplantation. This research showed two biopsies of the oral mucous of the submitted patients bone marrow transplantation. In the microscopic exam, it is observed a normal mucous in one biopsy, evidencing the success of the transplantation, and in the other characteristic alterations of the graft-versus-host disease, showing the failure of it. Among the alterations, it can be observed intraepithelial blister that demonstrates the level III of the graft-versus-host disease. In conclusion, the biopsy of the oral mucous of the submitted patients of the bone marrow transplantation is one of the main resources to check of the success of it.

171. Influence of denture cleansers on surface microhardness and roughness of acrylic resins polymerized by microwave or light

MOURA*, J. S., LIMA, E. M. C. X., SILVA, W.J., SOUZA JR. J. A., RODRIGUES GARCIA, R. C. M., DEL BEL CURY, A. A.

The aim of this work was to evaluate the influence of denture cleansers in surface characteristics of two acrylic resins – microwave and light-cured – in the following groups: G1) microwave resin without cleanser; G2) microwave resin and enzymatic cleanser; G3) microwave resin and sodium hypochlorite at 0.5 %; G4) light-cured resin without cleanser; G5) light-cured resin and enzymatic cleanser; G6) light-cured resin and hypochlorite. Twelve samples of 5x5x2 mm were made for each group, which were immersed in distilled water for 24 hours and submitted to surface microhardness (SHIMADZU 2000 com 5g for 10s) and roughness (Surfcorder SE 1700 with wave length of 0,8 mm in 0,5 mm/s) evaluations (T0), and then immersed in artificial saliva for 28 days at 37 °C. During this period, samples of the G1 and 4 were immersed three times a day in distilled water, G2 and 5 enzymatic cleanser and G3 and 6 in hypochlorite. Surface microhardness and roughness were also measured 24 hours, 14 and 28 days after immersion in saliva (T1, T2 e T3). Results were submitted to analysis of variance and Tukey test at 5 %, indicating an increase in roughness and hardness values in all groups, except for G2. According to these results, it could be concluded that the use of denture cleansers did not interfere on the deposition of artificial saliva on acrylic resins, indicating the non-efficacy of these agents when not associated with other hygiene methods.

173. Microstructural analyses of a biphasic amorphous ceramic

BOSCATO, N.*; DELLA BONA, A.; DEL BEL CURY A. A.

Quantifying microstructural parameters is important to develop structure and property relationships. Quantitative microstructural analysis provides an association among the constitution physical properties and structural characteristics of materials. The objective of this study is to characterize the microstructure, composition and some physical properties of an amorphous ceramic (VITA-VM7 Zahnfabrik, Bad Säckingen, Germany). Eight ceramic specimens were fabricated according to the manufacturer's instructions and ISO 6872 and polished through 1200 SiC paper. Quantitative and qualitative analyses were performed using scanning electron microscopy (SEM), backscattered imaging (BSI) and electron dispersive spectroscopy (EDS). The elastic modulus (E) and Poisson's ratio (ν) were determined using ultrasonic waves. The density (d) was obtained using a helium pycnometer. The results were as follows: E: 58,1 GPa; ν : 0,25; d: 2,59 g/cm³. SEM, EDS and BSI analyses revealed the following composition for VITA VM7: Si(K) 19,6%; Al(K) 4,9%; K(K) 4,0%; Na(K) 2,4%; Ca(K) 0,7%; C(K) 25,7%; O(K) 42,2%. The amorphous ceramic studied presents adequate values of E, ν , d for use as veneering material on metal-free frameworks of compatible CET. The presence of two silica-based glassy phases classify this ceramic material as a biphasic amorphous glass.

170. Gingival hyperplasia: a case report

SOBRAL, L. M*.; MASSUCATO, E. M. S.; MENEZES, L. F.; FELIZARDO, K. R.; NABUCO, R. B.; BELLUCI, M. M.; ONOFRE, M. A.

Gingival growth may be classified through possible etiologic factors and/or pathologic problems. The factors, which enable the deposit of dental plaque, include a deficient oral hygiene, associated orthodontic therapy and habits, such as oral breathing. One of the ways oral breathing may influence gingival alterations is through surface dehydration. Patient W.D.L., 13 years old, male, came to the Oral Medicine Service, directed by an orthodontist, in order to have an evaluation of his hyperplastic gum. The clinical exam detected use of a fixed orthodontic appliance, it displayed deficient oral hygiene, and because of his habit to oral breath, deficient lip seal. His gum was swollen in its entire surface, both, the maxillary and mandibular arches, and reddish around the region of tooth 12, also in some areas, his clinical crown was almost completely covered. The patient was directed to the Periodontal Clinic that requested an orthodontist the appliance removal, control of the plaque by tooth scaling and polishing. Later, it was conducted gingivectomy on both upper and lower arches. The material collected was sent to histopathological analyses. The diagnosis given was: hypertrophic mucosa with fibrosis and granulation tissue remains, without atypias. The patient was advised, directed to an orthodontist and he's been watched by our service and the periodontal department.

172. Retention in the pulp camera - a modification of the o'ring system technique.

BRUNETTO, P. C.*; RAMOS, G. G.; CASSELLI, H.; SILVA, W. A. B.; SILVA, F. A.; CABRAL, C. W. L. F.

A free-end affects the firmness of a removable partial denture very much and whenever it is possible no anchorage and a distal retention has to be used. A 63 year-old-patient, I.I.S., class II according to Kennedy classification, had the root 47 moved and the movement decreased the cervical-occlusal space. So, the usual technique of the o'ring system couldn't be used in this case. As the maintenance of this root was very important to the retention and to the stability of the removable partial denture a modification of the technique was suggested and an inversion in the position of the attachments was done – the female part of the attachment was put in the root together with the metal core and the male part was put on the plastic saddle of the prosthesis. This modification permitted the maintenance of the root 47 and created better retention and firmness to the removable partial denture, favouring the matching of the denture and the chewing by the patient.

174. An alternative in the rehabilitation with overdenture: pré-fabricated bar system

LIMA, E. M. C. X.*;MOURA, J. S.; NÓBILO, M. A. A.; DEL BEL CURY A. A.

Implant-supported prostheses significantly improve comfort and chewing function efficacy in comparison to conventional complete dentures. In such rehabilitations, chewing function improves due to an increased mechanical stability and retention, and probably also due to a greater masticatory force when compared to complete dentures. Also, implant-supported prosthesis provides better phonetics and oral hygiene to patients. Implant attachments of various designs are used to retain, stabilize and sometimes support overdentures. The most common attachments used are bar systems, which retain clips fixed on prosthesis, ball or o'ring systems, which are retained through attrition to female retentive sockets in the overdenture base and magnetic retainers. Currently, pre-fabricated bar systems can be used with accuracy, easy execution, speed and lower cost. Thus, the aim of this study was to describe a rehabilitation with conventional complete maxillary denture and a mandibular overdenture retained by two cylindrical implants through a pre-fabricated bar-clip attachment.

175. Water sorption and solubility test in heat-polymerized acrylic resin processed in mono and bimaxillary flask.

MELOTO, C. B.*; RIZZATTI-BARBOSA, C. M.; MACHADO, C.; RIBEIRO, M. C.; JOIA, F. A.; SILVA-CONCÍLIO, L. R.; SILVA, L. H. G.; SOUSA, R. D. S.

The aim of this study was to evaluate water sorption and solubility in heat-polymerized acrylic resin when processed in monomaxillary flask by water bath and in bimaxillary flask by microwave energy and water bath. Fifty heat-polymerized acrylic resin samples were confectioned and divided in 3 groups: 10 samples for Group 1 - metallic monomaxillary flask for water bath (conventional technique); 20 samples for Group 2 - PVC bimaxillary flask for microwave energy; and 20 samples for Group 3 - metallic bimaxillary flask for water bath. Mean values for water sorption were: Group 1: 1.1324; Group 2: 1.0875 and Group 3: 0.9864, with statistical difference only for Group 3 ($p < 0.05$) at the Tukey's test. For the solubility test, mean values were: Group 1: -0.087; Group 2: -0.12422 and Group 3: -0.01538, also with statistical difference only for Group 3 ($p < 0.05$) at the Kruskal-Wallis test. It was concluded that the microwave energy processing method did not influence water sorption or solubility of the samples when compared to the conventional technique. Only samples processed in metallic bimaxillary flasks presented higher water sorption and lower solubility values when compared to samples processed by conventional technique and microwave energy.

177. Application of the covering occlusal and removable partial prosthesis in the re-establishment of the vertical dimension of patient bruxism - case report

GADDINI, H. C. R.*; SARACENI, C. H. C.; COSTA, C.; MARTINS, R. B.; TOSTA, M.F. M.; MUZZILLI, C. A.

The need of the devolution of the vertical dimension in patient bruxism bearers with painful symptomatology and wear and tear of the dental surfaces, is plenty known. In the present case the authors demonstrate the application of the methodology based in the use of plates interocclusion for re-establishment of the initial vertical dimension. With that is possible jaw repositioning and to interrupt the painful symptomatology. This way they emphasize that we needed to rehabilitate the patient with this new position occlusion. Being taken into account external factors as the patient's socioeconomic situation, the possible backtrack of the process, and the superficial texture of the teeth in resin, it was proposed as therapeutic conduct the use of removable partial prosthesis with the objective of reestablishing the occlusion through the covering occlusion of the remaining dental elements, being returned the vertical dimension and the contacts with the antagonistic arch. We can conclude that the use of simpler resources as the removable partial prosthesis results in favorable results in the re-establishment of the vertical dimension in patients with severe degrees of wear and tear occlusion, being necessary the covering occlusion of the remaining elements so that the results are stable.

179. Interdisciplinary rehabilitation of a partial edentulous patient presenting mandibular tori

CÔRTEZ G., BRASILEIRO B. F., RIZZATTI-BARBOSA C. M., ALBERGARIA-BARBOSA J. R., LOVADINO J. R.

The interdisciplinary relationship that surrounds the planning therapy of partial or total edentulous patients in Dental Schools is challenging. Adequate diagnosis and precise treatment sequence should be instituted accordingly to all specialties in dental health. The purpose of this paper is to describe an interdisciplinary approach to a patient who required surgical, periodontal, restorative and prosthetic dental treatments developed in the Graduation Integrated Clinic of Piracicaba Dental School, State University of Campinas. It was performed bilateral mandibular tori removal, periodontal disease control, anterior mandibular tooth restorative dentistry, and maxillary full prosthesis and mandibular parcial prosthesis (Kennedy Class I) rehabilitation. Chronological execution of operative steps execution demonstrated a successful clinical outcome with satisfactory social, functional, and esthetical conditions reestablishment, based on an integrated oral care program.

176. Linear dimensional changes of one hard chairside relined resins and one heat-curing acrylic resin

PEREZ, N. C.*; GONÇALVES, A. R., MACHADO, A. L., VERGANI, C. E., GIAMPAOLO, E. T.

This study evaluated the effect of microwave disinfection (650W for 6 min) on the linear dimensional alteration of the resin for rebase New Truliner (NT) and of the heat cured resin for base of denture Lucitone 550 (L). A stainless steel mold (50mm of diameter 0,5mm thickness), with reference points, was used for the confection of the samples of each material ($n=24$). The distances between the points were measured with a Nikon optical comparator. The difference between the linear dimension of each specimen and the measurements made on the stainless steel mold was calculated and expressed as percentage change. Measurements were made after 2 cycles of disinfection (G I) and 7 cycles (G II). The samples of the control (G III) had been measured after the polymerization for the material NT and after storage in water 37°C for 48 hours for material L. The results were analyzed by Kruskal-Wallis (significance-1% level). The resins had presented contraction in all the groups. For material L, it had significant difference ($P < 0.05$) between all groups (I-1.02%; II 1.43% and III-0.30%). For resin NT, the average values of contraction of the radiated groups, I (1.27%) and II (1.18%), had been equal between itself and higher than the control group (III 0.31%). The microwave disinfection resulted in significant increase of the contraction of resins for base L and rebase NT.

178. Dental inclination in maxillary and mandibular complete dentures processed in monomaxillary and bimaxillary flasks

RIBEIRO M. C.*; RIZZATTI-BARBOSA C. M.; SOUSA R. L. S.; SILVA-CONCÍLIO L. R.; MACHADO C.; JOIA F. A.; MELOTO C. B.; SILVA L. H. G.

The purpose of this study was to evaluate first molar inclination in maxillary and mandibular complete dentures processed in monomaxillary and bimaxillary flasks by microwave irradiation (at 20 % power for 20 minutes and 60% power for 5 minutes). Forty pairs of type-III-stone models were obtained, and complete dentures were waxed and standardized with a special appliance. Dentures were divided in four groups, according to flasking and processing procedures: group 1 - flasking with stone in monomaxillary flasks; group 2 - flasking with silicone rubber and stone in bimaxillary flasks; group 3 - flasking with stone in bimaxillary flasks; group 4 - acrylic resin retentions were confectioned on buccal tooth surfaces, and flasking were taken with silicone rubber in bimaxillary flasks. For each tooth, two reference points were determined (in mesio-palatine and distobuccal cusps for maxillary first molars and in mesio-buccal and distolingual cusps for mandibular first molars). A linear comparator microscope (Olympus, 0,0005 mm tolerance) was used to measure the distance between two reference points, determining a triangle side. Using Pitagora's Theorem and Cossen Law, tooth inclination angles were calculated. Data were submitted to Correlation test and Kruskal-Wallis (5% significance). There was no correlation between right and left side angles and no correlation between maxillary and mandibular angles for all groups. For maxillary right angle, there were significant statistical differences ($p < 0.05$) before and after processing among groups I (39.64° and 40.79°, respectively), II (38.20° and 39.66°) and III (39.14° and 40.12°). However, for group IV, there was no significant statistical difference ($p > 0.05$) before and after processing (39.49° and 40.73°). For mandibular right angle, there were significant statistical differences ($p < 0.05$) before and after processing between groups II (37.92° and 38.47°) and IV (39.54° and 40.22°). However, there was no significant statistical difference ($p > 0.05$) between groups I (38.11° and 38.22°) and III (39.46° and 39.60°). For maxillary left angle, there were significant statistical differences ($p < 0.05$) before and after processing among groups I (38.89° and 39.95°), II (39.47° and 40.26°), III (38.45° and 40.11°) and IV (41.98° and 43.04°). For mandibular left angle, there were significant statistical differences ($p < 0.05$) between groups III (40.35° and 39.81°) and IV (39.82° and 40.25°). However, there was no significant statistical difference ($p > 0.05$) before and after processing between groups I (39.57° and 40.34°), and II (38.84° and 39.69°). Regarding angle mean values, there was no significant statistical difference ($p > 0.05$) before and after processing for all groups. It could be concluded that alterations observed in tooth inclination were similar for all flasking and processing procedures.

180. In-Ceram System: Aesthetics in Anterior - case relate

CUNHA, M. O.*; CRUZ, M. V. J.*; NORONHA, L.M.*; MAIA, I. P. G. R.*; SILVA, F.A.*; SILVA, W. A. B.*; CASSELLI, H.

Among all options of prosthetics crowns in the market, metal-ceramic remains the most accepted material used in fixed prosthesis, due to its resistance and predictability. It has the disadvantage in the aesthetic point of view, what can be solved with the use of ceramic crowns, which allow better light transmission reaching better results. The Odontological market supplies a great variety of ceramic systems, which can be used in prosthetic crowns. The In-Ceram system is one of the most popular, able to provide excellent aesthetical results, marginal adaptability and high resistance. It is indicated to unitarian crowns, anterior and posterior, partial fixed of three anterior elements, inlays and onlays. This panel illustrates the cases of a patient who had metal-ceramic crowns superimposed melted metallic nucleus in the canines and was unhappy with its aesthetics. Therefore, was planned to replace it with In-Ceram system.

181. Immediate overdenture – A report of a clinical event comprehending interdisciplinary procedures.

HERRERA, F. S.; CAETANO, I. M.; PERERIRA, J. R.; BONFANTE, G.

One of the most effective and conservative way to solve a prothetic problem of a patient who has some remaining lost teeth is using immediate overdentures, which is applicable to all those patients whom lost of teeth is unavoidable. Due to the fact that an overdenture is supported not just on the gums, but on the bone and the roots. This kind of treatment preserves the alveolar crest and the patient don't stay whitout teeth at any moment. In this event, a female 42 years old patient looked for our Clinic because she was losing her teeth and needed to recuperate them. Periodontic surgery was done at the lower ones (bone and gum graft) that could be saved, but the upper ones had to be extracted, except the canines, which were endodontic treated and conserved above the denture as a core post and two molars. The treatment of pre edentulous patients with periodontal disease requires an interdisciplinary evaluation sighting to restore function, esthetics and phonetics.

182. The somatization process as a way of communication

DUQUE, D. C.*; NAVARRO, C. M.; SPOSTO, M. R.

Integral assistance for the patient must be based on an interdisciplinary approach. The physical symptoms represent and reveal non-verbalized distress. Oral diseases associated with emotional disturbance are common. The authors present a case of burning mouth syndrome that illustrates the importance of the interrelation between Oral Medicine and Psychology. J. R. C., male, 59 years old, was admitted at the Oral Medicine Service (O.M.S.) with complaint of burning sensation on the tongue and lips associated to dry mouth. The patient also presented bruxism, hiatus hernia, gastric reflux, psoriasis, Diabetes Melitus, hepatic esteatosis and erectile dysfunction. The oral diagnosis was Burning Mouth Syndrome associated to Candidosis and Xerostomy. Nistatin and artificial saliva produced mild improvement. We noticed that O.M.S. consultations and burning mouth relief were coincident, showing the development of an emotion dependence of the patient in relation to O.M.S. attendance. He searched psychological attendance in O.M.S. and the psychodiagnosis were depression associated to severe anxiety, moderate stress and hypochondria. The patient is under physical and mental care with the interdisciplinary attendance to reach improvement of life quality. The psychotherapeutical process can help the patient to find other ways of expression and communication that are different from the somatization of diseases.

183. Oral breather in child dental clinic.

NIETO, A. M.; LUTGENS, M. M.; SÂNDALO, K.; TOLEDO D. B.; TOMITA, L. M.; CARRASCOZA, K.C.; SCARPARI, C. E. O.; POSSOBON, R. F.; MORAES, A. B. A.

Oral breathing causes and consequences were studied with the purpose to create an assessment protocol to make possible early diagnosis and intervention. Participants were 40 children (ages 3-5 years) submitted to periodical clinical evaluations as a part of the Orthodontic / Phonoaudiologic Program of the Research and Dental Treatment Center for Special Patients (Cepae/FOP/UNICAMP). According to their breathing patterns children were divided in 2 groups (oral and nasal breathing habits). Clinical examination and mother's interviews were the data collection instruments. Statistics analyses included chi-square and Fischer Exact test. Results indicated greater frequency of baby bottle and pacifier use among oral breathing subjects. It seems possible to suppose that allergic rhinitis and genetic predisposition may be factors closely related to oral breathing. Possible consequences of these habits are the frequent occurrence of influenza/colds, open mouth sleeping, snoring, changing phonemes, inefficient chewing, swallowing with tongue interposition and bruxism. As a conclusion, it must be emphasized that an assessment protocol for early diagnosis must include behavioral indicators of oral breathing that may serve as a general profile to dentist's intervention procedures.

184. Children caries: family motivation relevance for prevention.

GIBILINI, C.*; CHIAROTTI, A. P. S.; SCARPARI C. E. O.; TOMITA, L. M.; CARRASCOZA, K. C.; POSSOBON, R. F.; MORAES, A. B. A.

The Research and Dental Treatment Center for Special Patients has developed in the last 11 year a whole set of interventions to motivate the dental patients' family to acquire and incorporate home preventive oral health practices. Even though it is still recorded a caries index of 5% (below average reported in the literature). The aim of the present study was to identify factors that may be related to this 5% index (white spots and cavities). Participants of this study were 60 children (3 to 4 years) attended during 2002: 20 presented spots, 20 cavities and other 20 did not show any tooth lesion. Statistics analysis was made through Chi-square and Fischer Exact tests. Data were collected in the clinical files of the Research Center. Results indicated that saccharosis consumption frequency, white plaque index, tooth brushing behavior and flossing were variables related with caries in the studied sample. In addition it is out standing other related factors as child cooperation during tooth brushing, flossing and also mother compliance toward dentist's instructions. Instructions related to preventive practices must be associated with conditioning home efforts to improve cooperation a better levels of oral health.

185. Association between behavioral and pharmacological strategies in pediatric dentistry.

ROLIM, G. S.*; CAMPOS, E. B. V.; CARRASCOZA, K. C.; SCARPARI, C. E. O.; TOMITA, L. M.; POSSOBON, R. F.; MORAES, A. B. A.

The fearful child presents difficulties front to the requirements of the dental treatment, needing alterations in the clinical routines and the management strategies. The aim of the search was associate behavioral and pharmacological strategies to assist fearful patients. 16 children had been treated (4-5 years), and divided in two groups, with not-cooperative history. The design established that, until 5thS(G1) and 2ndS(G2), the treatment it would be realized if only had child's cooperative behavior, allowing that the child could adapt to the experimental conditions (Diazepam/Placebo and behavior management). The results shows that only 1 child was sensible to the drug effects. From the moment where the treatment could be carried through without the cooperation, the dentist use physical restraint for control child non-cooperative behavior. The use of physical restraint seems not to have influenced adversely the relation dentist-patient and the use of the aversive control became a established operation for the selection of new behaviors. The strategies can have assisted the coping of the children in some routines; however, it seems to be, that in the Diazepam sessions, the use of the physical restraint increased the frequency of avoidance behaviors. The association of these strategies requires studies testing with other designs

186. Dentist actuation in oral habits removal groups.

LUTGENS, M. M.*; MELLO, R. C.; GIBILINI, C.; SCARPARI, C. E. O.; CARRASCOZA, K. C.; TOMITA, L. M.; POSSOBON, R. F.; MORAES, A. B. A.

The present study assessed the efficiency of the interventions promoted by the Oral Habits Removal Group (GRHO – Cepae/FOP – Unicamp) during the years of 2002 and 2003. Participants were 22 children (3 – 5 years old), regular patients of the Preventive Cepae's Program, that showed thumb sucking habits and/or bottle-feeding and/or pacifier regular habits. Children were divided in two groups considering the prevalent habit. For each group, 4 meetings were carried out including 18 children in the bottle-feeding/pacifier group and 4 children in the thumb-sucking group. Ludic activities approached the habits in a non-directive way, without introducing what "to do" and "not to do" recommendations. Mothers were instructed in a non-formal way explaining oral habits consequences and the importance of helping the child without repetitive reprimands. Results showed that from the children that presented bottle-feeding and pacifier habits, 70% interrupted both habits, 15% interrupted bottle-feeding and 15% showed no successful results. For those children that presented only one habit 80% were successful in eliminating such behavior pattern. For the thumb-sucking group, it was observed only a frequency decrease of the habit but not its complete elimination. The present study represents an opportunity to discuss non-directive habit management effectiveness as a motivation procedure to deal with oral habits and its importance in family counseling.

187. Oral Health Promotion in an early care and research Program.

LISSO, M. T.*; RAVEN, F. G. C.; TOMITA, L. M.; CARRASCOZA, K. C.; SCARPARI, C. E. O.; POSSOBON, R. F.; MORAES, A. B. A.

The objective of the Research and Dental Treatment Center for Special Patients is the promotion of early preventive intervention related to orofacial problems. To attend such objective, a multidisciplinary team (dentists, psychologists, nutritionists and phonoaudiologists) develop integrated actions. The present study evaluated the clinical and research activities carried out between 2001 to 2003, when 987 patients and 231 pregnant were attended. For those patients, that concluded the program in 2003, the prevention index obtained was 72%. Considering the patients that entered in the program during the years of 2001, 2002 and 2003, prevention measures identified were 95%, 97% and 100%, respectively. Considering that this Research Center has been working for 10 years, the integration of research and service has produced important results in the development of research projects in graduation and pos graduation levels. Up to now, the Reserch Center produced 6 Master Degree Dissertations and 3 Doctor Degree Thesis. At this moment 4 Master dissertations and 2 Doctor Thesis are in data collecting process. Results indicate that Cepae has attained its main objective, being socially considered a reference Center in the community.

189. Mother's prepare of children under invasive dental treatment.

CHIAROTTI, A. P. S.*; TOMITA, L.M.;NIETO, A. M.; CARRASCOZA, K. C.; SCARPARI, C. E. O.; POSSOBON, R. F.; MORAES, A. B. A.

The aim of the present study was the anxiety assessment of 10 mothers and their children immediately before a dental treatment session. Dentist's assessment about mother's and children's anxiety was also evaluated. Anxiety assessments were based in questionnaires. Subjects were 10 mothers evaluated before 6 dental treatment sessions of each child. All dental treatment sessions recorded through videotape. Results indicated that according to dentist's perception mother showed still and calm behaviors in 65% of the sessions and children were perceived as calm (and cooperative) in 30% of the sessions. The dentist pointed out that dental injection was the procedure that evoked most of the anxiety related behaviors, suggesting the perception of aversiveness of the mothers under such situation. On the other hand, mother informed to be still during 75% of the sessions, but considered their children being calm in 67,5% of the dental treatment sessions. Dentists must be trained to handle invasive dental treatment situation dealing with mothers and children's anxiety. So more detailed information about dental treatment anxiety related issues must be of topic of concern for professional and patients.

191. Evaluation of the vertical adjustment after the rectification employment for pillars of prosthesis implanted type cast UCLA.

NOVAIS, V. R.*; SIMAMOTO JÚNIOR, P. C.; HORBILON, B. Z.; QUAGLIATTO, P. S.; SOARES, C. J.; NEVES, F. D.

The aim of this study was to evaluate "in vitro" the fit degree before and after the use of cast cylinders rectificator, in fixed prostheses of three elements, previously the soldering. Eighteen UCLA plastic (Conexão Sistemas de Próteses, Brazil) were cast at Nickel-chromium (Verabond II) for metal-ceramic restorations, starting from master model. After the making of samples, on the working cast, they came back to the master model and screwed with torque of 20 N/cm. The reading of the vertical fit was accomplished in electronic microscope of sweeping of variable roding of the vertical fit was accomplished in scanning electron microscope of variable pressure (LEO-435 VP), analyzing medial and distal face of each pillar, conclude 72 measured. The results were submitted to statistical analyse using t Wilcoxon test ($p < 0,001$). Significant statistical difference was observed after rectification of the pillars. In the analysis of the accumulated frequency it was verified that 64% of the pillars presented fit = 10 μ m, being observed optimization after rectification with increase for 94% of the pillars with measures = 10 μ m. It can be concluded that the rectification promotes significant improvement in the marginal adaptation of plastic pillars UCLA.

188. Patient and his family's maintenance in a preventive oral treatment: the evaluation of non-adhesion's reasons.

RAVEN, F. G. C.*; LISSO, M. T.; CARRASCOZA, K. C.; SCARPARI, C. E. O.; TOMITA, L. M.; POSSOBON, R. F.; MORAES, A. B. A.

Preventive and educative actions have been considered primordial interventions toward children considered as special dental patients, for being in a pre-cooperative age and also dependent of parents presence and participation. These actions represent a Research and Dental Treatment Program for Special Patients. Cooperation and compliance are necessary conditions for the success of the program. However, non-adherence has been observed in non-systematic patients, as missing or giving up to scheduled appointments. Intending to analyze the causes of these problems with 140 children that left the Program between 2001 and 2003, a questionnaire was applied and answered by mothers. Results indicate a decrease in the frequency of non-adhesions (2001: 13%; 2003: 9%; 2003: 9%). The most frequent factor reports by the mother was children's crying during the dental session (37%), difficulties related to public transportation and the number of recalls. It must be recognized that non-adhesion frequencies in this Prevention Program is lower that those reported by similar services. This study suggest the importance of the causes of non-adhesion appointments as an adequate instrument to evaluate the quality of the service and the possibility of taking new and corrective directions.

190. Analysis of the ajuste implant/abutment ucla in the processing of fixed prostheses of different configurations, joint for brazing and welding

SIMAMOTO JÚNIOR, P. C.*; BARBOSA, G. A. S.; SOARES, C. J.; FERNANDES NETO, A. J.; NEVES, F. D.

The aim of this work was analyze the effect of the soldering comparatively in the fit of the interface abutment/implant of fixed prostheses of three elements, starting from two masters models in aluminum, configured in arch and straight line. The results of two different soldering processes were compared it welds to laser and brazing applied in the union of the castable UCLA abutment of 12 models of work of three elements, melted in league of NiCr. The same ones were divided in four groups: Group A, welds/arch; Group B, brazing/arch; Group C, welds/straight line and Group D, brazing/straight line. After the casting stages and it welds respectively, the prostheses came back to the master model for evaluation of the abutment/implant interface; it was used for the analysis, an scanning electron microscope (LEO-435 VP-Germany), in the increase of 500x. The results were submitted to statistical treatment ($p>0,05$). Significant statistical vertical adjustment differences were not observed among the different soldering processes (Groups A x B and C x D) and eithex with relationship to the different configurations (Groups A x C and B x D) when compared. Although was verified in the models worse values of the vertical and horizontal adjustment after the soldering processes.

192. Oral rehabilitation of a patient with hemifacil paralysis with signs and symptoms of TMD

ARAUJO, F. P. C.; CRUZ, M. V. J.; MAIA, I. P. G. R.; SILVA, F. A. E.; SILVA, W. A. B.; PAIXÃO, F.; SILVA, L. L. B.

The neuromuscular activity between the facial nerve and the mimical responsible musculature is responsible for the facial expressions. When this nerve is injured the facial mobility is blocked. The findings on facial paralysis are very common in odontology and are basically characterized by the interruption of the nervous stimulation in any segment of the affected nerve. According to Chevalier (1990) the non-development of the pontinos cell cores wich would origin the fibers of the facial nerve is one of the causes of congenit facial paralysis. Here we report the case of a patint with hemifacial paralysis with signs of temporomandibular disorder after an cirurgical attempt of correction of his muscular atrophy trough a microcirurgical cut of the gracial muscle. For the reperred patient the use of a plan interocclusal device was planned objecting a remissal of the pain after of wich the patient's rehabilitation was achieved with removable partial prosthesis held by braces and O rings sistem. The patient presents an stable condition and is syptom free for ten months.

193. A surgical-prosthetic planning of fixed complete denture and overdenture retained by implants

UZ, M. V. J.*; SILVA, F. A.; SILVA, W. A. B.; MAIA, I. P. G. R.; PAIXÃO, F.; SILVA, L. L. B.

The absence of stability and retention are the most frequent complaint associated to conventional dentures, specially to the dentures at the inferior dental arcade. The use of osseointegrated implants has been proposing, in a few cases, a better solution as functional as estetical when compared to conventional rehabilitations, and plan viewing the whole has been the goal of the modern dentistry. So, the surgical-prosthetic planning is by itself an important stage to a successful treatment with implants, because at it there is the diagnosis and treatment plan. This leg self-constitute in the study cast confection, the articulator setting, the confection of radiographs and surgical templates that will help at the quantity and seating determination of implants and artificial tooth. This job talks about a clinical case of a total toothless patient, which was plan a lower fixed complete denture and na upper overdenture retained by implants.

194. Bränemark Protocol – Rehabilitation of total edentulous patient

SILVA, L. L. B.; SILVA, W. A. B.; SILVA, F. A.; LANDULPHO, A. B.; RAMOS, G. G.; CABRAL, C. W. L. F.; CRUZ, M. V. J.

Patients with edentulous jaws frequently sustain functional and psychological disorders, which increases according to time, while bone continues its resorption, leading to prosthodontics instability. Through years, innumerable attempts have been made to solve these problems. Osseointegration discovery was paramount in the history of dentistry, demonstrating a series of advantages in oral rehabilitation, as long as lost tooth could then be replaced. The aim of this paper is to describe a case report of a total edentulous patient who undertakes Bränemark Protocol, he was rehabilitated with a removable complete maxillary denture and an implant-supported mandibular fixed prostheses. This treatment has proven its effectiveness on replacing teeth, with satisfactory outcomes in mandibular edentulous patients, showing secure previsibility and long-term successful results while reestablishing patients' function and aesthetics.

195. Prevalence of non carious cervical lesions in students of the Federal University of Uberlândia – Pilot study

RODRIGUES, M. M.*; LELIS, B. C.; SILVA, F. M. L.; SANCHES, F. F.; FERNANDES NETO, A. J.

Non carious cervical lesions (LCNCs) are characterized by the hard loss of tissue in the cement-enamel junction (CEJ) and generally are classified as attricion, abrasion, erosion and abfraction. The prevalence of the LCNCs varies between 27 to 85% in diverse population studies, being the great variability of the indices due to the fact of the LCNCs to be of gradual origin in adult, increasing with the age and, therefore, tying the prevalence with the ages band of the studied population. With the increasing number of these lesions in the odontology clinic, it was noticed necessity of research with regard to this subject, therefore a pilot study was become with objective to observe the prevalence of the LCNCs in students of the FOUFU and to relate the lesions with the possible etiologic factors. Six patients by means of clinical examination and questionnaire had been evaluated, and observed a prevalence of 66,6% of LCNCs in the patients with age of 20 and 21 years, being that 75% presented parafunctional habit, 75% possessed acid diet and 50% had told dentinary sensitivity. Evaluating the initial results, a possible relation of the etiology with parafuncionais factors and the diet could observe an increasing prevalence of LCNCs in young adults.

196. Corrective rectification of implant-supported structures: The influence on the marginal fit and on the reliability of the single-screw test

DAROZ, L. G. D.*; FRAGOSO, W. S.; HENRIQUES, G. E. P.; MESQUITA, M. F.; CONTRERAS, E. F. R

Implant-supported prostheses of multiple elements fail in obtaining maximum adaptation. Moreover, the laboratorial evaluation of misfit - known as single-screw test - doesn't consider imprecision of retention screw establishment base, which could influence the final results. The objective of this study was to evaluate the marginal fit of cast implant-supported structures after marginal borders rectification (trimming) of the cast cylinders (Pins to Straighten Casted Acrylic Cylinder, Conexão - Sistemas de Prótese). The reliability of the single-screw test was evaluated after the rectification of the fixation screw establishment base. A metallic index containing 05 Micro-Unit type abutment analogs (Conexão - Sistemas de Prótese) was used to simulate the mandibular arch. Ten structures using five acrylic cylinders each were fabricated by one piece-cast method using commercially pure titanium. The cast frameworks were evaluated using single-screw test under a measurement microscope to determine the marginal misfit in the following stages: (1) after casting; (2) after the rectification of the prosthetic screw establishment base; and (3) after the rectification of the prosthetic cylinders borders. The averages for each stage were: 1) 332.87 mm; 2) 333.21 mm; and, 3) 330.29 mm. There were no significant differences among the groups ($P = 0.9944$) (3-way ANOVA). It could be concluded that the corrective rectification didn't reduce the values of marginal misfit and the single-screw test is reliable for evaluation of multiple pieces.

197. Effect of casting procedures on implant/abutment hexagonal misfit

SANADA, J. T.*; VALLE, A. L.; BONFANTE, G.; KANO, S. C.

The effect of prosthesis misfit on osseointegration is still lacking, however, prosthetic components complications have been related to prosthetic misfit. A direct correlation was found between implant-abutment hexagonal rotational misfit and screw joint loosening and less than 2 degrees resulted in the most stable screw joint and the greatest resistance to screw loosening. Therefore, the purpose of this study was to evaluate the effect of the casting procedures on the rotational misfit of cast UCLA abutments when compared to milled titanium abutments. The null hypothesis is that casting procedures do not influence the rotational misfit whether plastic cast abutments or premachined metal abutments with plastic sleeve are used. *Material and methods:* Forty-eight external hexagonal implants (Conexão Sistema de Prótese, São Paulo, Brazil) and forty-eight UCLA-type abutments were placed in 4 groups of 12 samples each: (1) milled titanium abutments, (2) premachined palladium abutment with plastic sleeve cast with palladium (3) plastic abutment cast with nickel chromium and (4) plastic abutment cast with cobalt chromium. Rotational misfit between external hexagonal of the implant and the internal hexagonal of the abutment was measured and recorded in degrees. Mean values for each group was analyzed with ANOVA and Tukey test. *Results:* A mean rotation misfit of $1.21 \pm .57$ degrees was found for group 1, 1.77 ± 1.31 for group 2, 1.98 ± 0.73 for group 3 and 2.79 ± 1.14 for group 4. Significant difference was found for group 4 when compared to group 1 ($p < 0.05$). *Conclusion:* Rotational misfit was less than 2 degrees for groups 1, 2 and 3 which may indicate a more stable screw joint. Group 4, however, presented significantly higher misfit when compared to milled titanium abutments and the mean value was higher than 2 degrees.

198. Marginal fit of implant-retained frameworks gotten by the technique of cemented cylinders

FRAGOSO, W. S.*; HENRIQUES, G. E. P.; MESQUITA, M. F.; AMBROSANO, G. M. B.; TRÓIA-JÚNIOR, M. G.

This work had the aiming to evaluate the marginal gap of cast commercially pure titanium (CP Ti) implant-retained frameworks made from the technique of cemented cylinders (CC), comparing with the conventional technique of one-piece casting (OPC). A metallic cast of the mandibular arc containing 05 analogs of Micro-Unit abutment (Conexão) was used. For manufacturing the frameworks, 20 dies in dental stone type V were originated of the metallic cast. The frameworks were casting by the Rematitan system (Dentaurum): in group OPC, plastic cylinders was used and for the group CC, titanium cylinders were incorporated in the framework with resin cement (Panavia F - Kuraray). The marginal gaps were measured at X50 magnification with a traveling microscope using the only screw protocol: tightness of 10 Ncm of distal screw and evaluation of marginal gap in the opposed extension. Mann Whitney exhibited statistical significant differences ($p = 0.0002$) between the mean values of the CC group (27.90 ± 9.56 ;m - DP 6.61) and OPC group (332.87 ± 956 ;m - DP 63.91). It was concluded that the cemented cylinders technique provided to the best marginal fit for implant-retained frameworks.

199. Influence of two acrylic resins and technical of transfer in osseointegrated implants.

BASTOS, P. L.*; DAMACENO, A. R.; LEITE, A. K.; BABONI, C. R.; NÓBILO, M. A. A.

Prosthetic rehabilitations supported by osseointegrated implant necessarily demand technique of molding of correct transfer, as well as obtaining of necessary models of plaster. The present study had as objective evaluates the influence of two acrylic resins (Duralay and Pattern) used for transfers union and still two techniques of transfer molding, through the evaluation of the lineal dimensional precision of the models in plaster. The samples were divided in: GI (Duralay), GII (Duralay-split up), GIII (Pattern) and GIV (Pattern-split up), and obtained 10 models for each material and each technique. The readings of the values of the dimensional alterations were accomplished in optical microscope, accurately of 0,005mm, through the measurement of the distances among them implant A- E, A-C, B-D, and soon afterwards, submitted to the statistical analysis of Kruskal-Wallis, at the level of 5% of significance. The results showed that the resin Pattern presented smaller values of dimensional alteration. However, there was not difference significant statistics in relation to the Duralay-split up resin. It was also observed that the samples with larger difference statistics were the groups made with Duralay, in that GII presented values considerably smaller of alteration than GI. The study ends that the use of Duralay, when split up, that obtains results similar to Pattern, allowing it use in practice clinic.

201. The influence of chair support position in the patient occlusal contact registration.

CABRAL, C. W. L. F.*; SILVA, F. A.; SILVA, W. A. B.; RAMOS, G. G.; VEDANA, L.; ANSELMO, S. M.; DEZEM, F.; ZANATTA, G.

The aim of this research was to evaluate the influence of the support chair position in the registration of the occlusal contacts in a patient, during this mandibular closing, in view of the importance of the occlusal registration for the oral rehabilitation. Twenty four subjects male and female, with complete natural dentition were selected for this study. The marking of the contacts by using a registration paper were performed with the patient seated in the chair with the support chair in two different position (90° e 45° degree in relation to the floor). The results were visually analyzed and submitted to the Mc Nemar statistic test. The results showed that when the patient is positioned making 90° degree with the floor, the contacts measured during mandibular slowly closing were located in the same region of the occlusal contacts measured during MIC closing. Otherwise, when the contacts were registred with patient positioned making 45° degree with floor, the contacts obtained during slowly closing were positioned posteriorly in relation to the contacts measured during MIC closing. The conclusion is that the support chair position influence the results of during the registration of the occlusal contacts.

203. The role of prosthodontist in pre, trans and postoperative stages in immediate loading protocols in edentulous patients.

SILVEIRA, D. B.*; NEVES, F. D.; PRADO, C. J.

The osseointegrated implants used since 1960 has been firm as an important rehabilitation technique. However, the rehabilitation accordingly to the conventional protocol of Bramemark demands a waiting period of four to six months, during which the patients use removable interim prostheses. The patients complain of discomfort and dissatisfaction from the use of these prostheses. Recently, based on primary stability and rigid connection, the protocols of immediate loading has been used. The primary stability depends mainly on the bone quality, and the interforaminal region of the jaw is the area of choice for the application of the related protocols. The rigid connection is important to prevent micromovements that leads to fibrous tissue encapsulation and loss of osseointegration. Moreover, it must be considered an adequate and criterious selection of patients, to identify those that possess local or sistemics risk factors. An interaction between the surgical and prosthetic teams is essential so that the prostheses can be installed in a few hours or days after the insertion of implants, allowing the patients to return to their physical and social activities in a shorter period of time. The purpose of this study was to show the role of prosthodontist in pre, trans and postoperative stages when immediate loading is used to rehabilitate edentulous patients.

200. Oral rehabilitation using provisional implant supported overdenture.

PAIXÃO, F.*; ANSELMO, S. M.; CRUZ, M. V. J.; ZANATTA, G.; CABRAL, C. W. L. F.; HERMANN, C.; MULLER, M. V.; SILVA, W. A. B.; SILVA, F. A.

The rehabilitation of an edentulous patient with mandibular fixed complete denture was the first kind of treatment using osseointegrated implant (ADDEL et al,1981). The classical technique (Bramemark,1977) requires a cicatrization time of 3 to 6 months, before applying load over the implants, another surgery to expose the implant screw and prothesis making. That's why researches are developing faster treatments, bringing the patients more comfort. This clinical case shows a multiple implants technique that allows an immediate occlusal load through an inferior provisional complete denture. It consists of a conventional complete denture previously made, that immediately after the implants placement, an acrylic resin rebasing is made in order to adapt the protheses. After finishing the adjustments, the protheses is screwed and fixed over the prosthetics components and the implants, in order to bring back the oral function, esthetic and comfort to the patient, immediately after the implants placement. Usually this technique is applied in older patients, aiming the oral rehabilitation and short treatment time. Through this technique, after approximate 4 hours of treatment, the patient shows a stomatognathic system reequilibrium.

202. Overdentures: an alternative for convertional complete dentures.

MACHADO, N. M.*; CRUZ, M. V. J.; SILVA, F. A.; SILVA, W. A. B.; SILVA, L. L. B.; VEDANA, L.; NORONHA, L. M.

In spite of the prevention be always in emphasis, nevertheless is very high the index of partial edentulous parson, with just a little teeth inappropriate for being pillar of fixed partial dentures or of a removable partial dentures. To offer a better prognostic to the patients, the profissinals suggest the extraction of remaining teeth to use a complete dentures. The objective of this work is to accentuate that in many cases the treatment that will make possible a better prognostic is that preserve the teeth remaining as long as possible. To increase retention and stability of the denture and to decrease the waste of alveolus bone, the overdentures has been an efficient alternative for conventional complete dentures. This clinical case mention a rehabilitation of a patient with superior overdenture and inferior removable partial dentures.

204. Clinical and radiography evaluation of effectiveness of intra-oral planes splint in treatment of TMJ' disfunctions.

RIBEIRO, C. S.; CRUZ, M. V. J.; DAMIS, A.; SILVA, F. A.; SILVA, W. A. B.; SILVA, L. L. B.; CABRAL, C. W. L. F.; LANDULPHO, A. B.

The present study evaluate the effectiveness of the intra-oral planes splint in signs and clinical symptoms of system stomatognathic's functional alterations. The evaluation included a clinical and radiographic examination, after one hundred and twenty days of treatment. Eleven patients between 14 and 60 years old were treated, which part of patient's CETASE bank – Center of Studies and Treatment of System Stomatognathic's Funcional Siterations. Each one was examined before and 30, 60 and 120 days after treatmente starting. The examination included anamneses palpation of bilateral masticatory muscles and auscultation of temporomandibulares articulations. The images used were obtained by modified UpDeGRAVE technique in folowing positions: intercuspal position, maximal open and rest. It was used a special board for this study to reproduce the images before and after the treatment. The statistical analysis of the results showed that the side right present significant differences, before and after the treatment ending in intercuspal position and rest (p< 0,05). The side left showed differences in intercuspal position, which can indicate the bekout of condyles. The clinical avaliation after treatment ending evidence, that the intra-oral planes splint were highly efficient into remission of the signs told and detected symptoms and modified UpDeGRAVE radiography indicate that there's a trend of both condyles to occupie optimal position in their respective mandibles fossae

205. Comparative assessment of transcranial radiograph and linear tomograph between patients with temporomandibular disorders treated with intraoral interocclusal plain appliance.

CARMO, L. A.*; SILVA, F. A.; DAMIS, A.; SILVA, W. A. B.; LANDULPHO, A. B.; CASSELLI, H.

The purpose of this study was to analyse the use of the intraoral interocclusal plain appliance and the condilar position in the articular fossa, in a period of 120 days. Eleven patients ranging from 14 to 60 years old were analyzed at the CETASE – Centro de Estudos e Tratamento das Alterações Funcionais do Sistema Estomatognático (Centre for Study and Treatment of Estomatognathic System Disorders), at Piracicaba Dental School – State University of Campinas. Radiographs were taken to view condilar positions by UPDEGRAVE technique and linear tomograph images. Statistical analysis revealed that after treatment with interocclusal appliance patients demonstrated optimized condilar position, with no difference to the side assessed. Comparison between the techniques demonstrated that despite the most efficient padronization of outcomes, simple and economic radiographs had great value when used in the diagnose of condilar position, before and after the treatment with intraoral interocclusal plain appliances.

207. Ludwig's angina: review of the literature and a case report

FOGAÇA, P. F. L.*; QUEIROZ, E. A.; KURAMOCHI, M.M.; VANTI, L. A.; LIMA, P. S. F. R.; CORRÊA, J. D. H.; MACIEL, F. J. L.

Ludwig's Angina is serious infection, potentially life-threatening and rapidly spreading infection, characterized by a cellulitis that affects the submandibular and sublingual tissue spaces bilaterally. Nowadays, its morbidity and mortality has been decreased, but it is necessary to do a correct and immediate diagnosis. The most often aetiology is odontogenic, particularly related to mandibular molars, but there are other causes such as oral mucosae lacerations, tonsillitis and infected mandibular fractures. Diagnosis is mainly clinical, and the patient usually presents fever, trismus, dyspnea, dysphagia and a "Woody" swelling on the floor of the mouth and supra-hyoid region bilaterally with elevation of the tongue that can result on obstruction of the airway. It can rapidly progress to asphyxia and sepsis. Asphyxia is the most common cause of death. Due to the disease's severity, treatment must be immediate and includes maintenance of airway, intravenous antibiotics in high dosage, surgical drainage and causal agent removal. Metabolic control and fluid replacement are important adjuncts. Author's purpose is present a review of the literature and relate a case of a 25 years old patient who had an odontogenic Ludwig's Angina treated on Emergency Service of Regional Sul Hospital, São Paulo.

209. The osteotome technique for implant placement in the posterior atrophic maxilla

TOSTA, M. F. M.*; SARACENI, C. H. C.; REAL, D. G.; GADDINI, H. C. R.; COSTA, C.

The posterior maxilla often presents limited bone height, which unables the placement of osseointegrated implants. Thus, the implant surgeon must use bone augmentation techniques. This article reports the use of the crestal approach with the osteotomes, for improving bone height in subantral areas, allowing simultaneously placement of non-submerged implants.

206. IOL system of provisional prosthesis in lower protocol with immediate loading: Clinical case report

OLIVEIRA, C.*; NARY FILHO, H.; NARY, P. E.; CUNHA, H. A.; FRANCISCHONE, C. E.; PEREIRA, F. A.; SARTORI, I. A. M.; FRANCISCHONE JUNIOR, C. E.

In this study, the authors present a clinical case in which the IOL system is used to make provisional implant-supported fixed prosthesis for edentulous jaws. This system is recommended for types of rehabilitation involving the lower protocol with immediate loading. In a single session, the patient C.S.S., a toothless, 71 y/o male, received five implants in inter-foramina region, and a provisional fixed prosthesis. With this technique, the prosthesis is made based on the patient's complete conventional prosthesis, employing the special IOL components composed of IOL abutment, a provisional titanium cylinder with retention and a distal extension bar. The objective of this study was to present an alternative rehabilitative treatment with immediate loading that offers advantages such as low cost, technical practicality, and reduced clinic time. Nonetheless, this method should be understood as provisional, requiring a new prosthesis following a period of osseointegration, respecting the conventional technical protocols that determine the rigid splinting of the implants using a metallic framework.

208. Efficiency of the surgical treatment of patient in an uncommon case of angina of Ludwig and sequelae in the ATM and face nerve.

ELIAS, J. C.

The ways of diffusion of the originary septic processes in teeth and face area maxillo, beyond important, can propagate infections the parts most distant of the human body. According to Sicher and Brull, of the ways of propagation of microorganismos, Lymphatic, Diffusion for the Continuity and by Venosa, they can constitute clinical picture of urgência/emergência in the odontologia, specifically oral and maxillo facial surgery. The patient of the feminine sex, 28 years, appeared to the doctor's office presenting temperature of 39°C, edema of hemi right jaw extending itself until cervical of the same side, intense pain, difficulty of buccal opening, and tooth 46 in endodôntico treatment. In contrast of literature, the diffusion followed for region of the ATM, leading the trismo, face paralysis of the seventh pair nerve, beginning of the process of ankylosis in the ATM. The use of the specific medication took the cronificação, with normal temperature. In this in case that rare of angina of Ludwig, we will show to the use of surgical technique that allowed the inside bone access, for gentamicina 160mg introduction, the removal of tooth 46, and treatment and fisioterapia applied to sequelae in the ATM and seventh pair nerve. An uncommon treatment, that after three months, the patient received high with 100% from cure.

210. Alveolitis: a study of prophylactic antibiotic therapy and predisposing factors

SILVA, J. R.*; MESSORA, M. R.; FURLANETO, F. A. C.; DELIBERADOR, T. M.; JACOB, V. P.; MELO, W. M.; MARIANO, R. C.; NAGATA, M. J. H.

Alveolitis is an usual complication after retained third molar extraction. A lot of methods, like an atraumatic technique, antifibrinolytics and antibiotics have been used, however without solid results. We thought to be convenient a realization of a study to evaluate alveolitis incidence after retained third molar extraction according to some specific factors (gender, smoke, pericoronal abscess history and kind of tooth retention) and to analyze the effect of profilatic antibiotic therapy. It has been accomplished 327 extractions of retained mandibular third molars by the same surgeon. Antibiotics were given in cases with more susceptibility to wound infection. The alveolitis incidence was calculated and related to the factors above and the values were submitted to statistical analysis. It was seen that women had more problems on the repair proceedings. There was a direct ratio between alveolitis and use of contraceptive, tooth retention on vertical and inclined to distal positions, pericoronal abscess history. So we are certain that there are some factors which predispose to alveolitis, but more research is needed to know how to prevent it, because it was seen, in this study, that the profilatic antibiotic therapy, that is often used, was not efficient.

211. Rehabilitation of edentulous patients by the Branemark protocol and immediate load

SGARBI, R. S.; STABILE, G.A.V.; ALLAIS DE MAURETTE, M.; MOREIRA, R. W. F.; MAZZONETTO, R.;

Since the original protocol of implants placement established by Branemark et al (1969), studies have been accomplished with the objective of simplifying the procedure, reducing the healing period, reducing the costs and concluding the prosthetic treatment until 48 hours after the surgery. The absence of loads on implants installed in a period from 4 to 6 months after surgery considered prerequisite for reach the osseointegration. Such condition became an inconvenience for edentulous patients that needs temporary prosthesis not supported by implants. However, to obtain satisfactory results, some essential factors must be considered such as primary stability, rigid connection among the implants, and precise surgical and prostodontic techniques and following the pré-established protocols. The crescent number of studies involving immediate load supports that the technique, when indicated correctly and inside of an appropriate surgical-prosthetic planning, it has been showing to be viable with high previsibility index in area previous of jaw where the bone is dense. The present study has as objective presents for mean of clinical cases the treatment with implants and immediate load in anterior mandible of edentulous patients.

213. Complications of intraoral donor site for bone grafting prior to implant placement.

CARIELLO, M. P.*; SERRA E SILVA, F. M.; CORTEZ, A. L. V.; MAZZONETTO, R.

The purpose of this retrospective study was to evaluate the morbidity and the major complications of intraoral donor sites for bone grafting prior to implant placement. The records of 88 consecutive patients with indication for bone grafting prior to implant installation treated at Piracicaba Dental School by the Department of Oral and Maxillofacial Surgery, from June 2001 until June 2003, were reviewed. One hundred and twenty fivesurgical procedures were realized, in which 40% were harvested from mandibular symphysis, 28.8% from mandibular ramus and 31.2% from maxillary tuberosity. Prevalence of complications among intraoral donor sites was more significant after harvesting the mandibular symphysis. The major complication and discomfort reported by the patients was sensory deficit in lower lip and mental area. It was noted that 16% harvesting procedures involving symphysis and 8.3% involving the mandibular ramus area reported some sensory deficit. No complications were found involving the maxillary tuberosity. Harvesting of autogenous bone from intraoral sites can be often associated with some complications of the donor site. Complications and morbidity were smaller in the ramus and all the postoperative sensory disturbances were recovered in all of patients.

215. Surgical removal of tooth element placed in the tongue womb, derived from a firearm trauma.

DUARTE, D. G.* ; SÁ LIMA, J. R. ; RALDI, F. V.

Wounds caused by firearms, hitting the Oral and Maxillofacial area, can cause from mild injury, in soft tissue, to severe fractures in the bones of the face. In sixty per cent of the cases, the projectile remains placed in the tissues and, the Oral and Maxillofacial area and the teeth have a significance in the trauma cases. Dental elements have already been found in several areas of Oral and Maxillofacial area, tough relates of teeth in the interior of the tongue are very rare in literature. The presente case describes the remotion of the tooth 11 inside the anterior third of the tongue of a male patient, victim of firearm wound, who looked for the Oral and Maxillofacial Surgery and traumatology department of FOSJC-UNESP, complaining about a rigid tumefaction in the anterior third of the tongue womb. After a clinical examination a fistula was observed in the tongue dorsus. the initial suspect was that the cause of the tumefaction was the projectile originated from the shot which after a probable deviation of it's trajectory, due to an impact with some facial structure, placed itself in the interior of the tongue. For the confirmation of the hipotesis of diagnose two radiographs of the area were made, one occlusal and the other lateral, where the presence of a tooth was noted. The removal of the tooth was performed at an ambulatory level, under local anesthesia.

212. Surgical treatment of recurrent temporomandibular joint luxation: case report.

FURTADO, L. M.*; BATISTA, J. D.; COSTA, M. D. M. A.; ZANETTA-BARBOSA, D.; MARQUEZ, I. M.

The temporomandibular joint luxation occurs when the mandibular condyle leaves from the temporal bone articular cavity, with impaction in front side of articular eminence, obstructing that it returns to original position. This disorder is uncommon, happening in people with neurologic disorders, temporomandibular joint disorders and patients using neuroleptics drugs. In cases of recurrent temporomandibular joint luxation, when the close treatment failed, the surgical treatment is one choice. Many surgical technique are described for this disorder. Our objective is to present bilateral eminectomy, a surgical technique for the treatment of recurrent temporomandibular joint luxation, showing surgical technique details, indications, advantage and disadvantage.

214. Surgical complications in osseointegrated dental implants

BARROS, A. B.*; STABILE, G. A. V.; ALLAIS DE MAURETTE, M.; MORAES, M.; MAZZONETTO, R.

The complications that occurs during dental implants placements are mainly due to the planning lack and/or current problems of the surgery itself, that without specific treatment for it correction, influence in the final treatment results, being the main consequence the lack implant osseointegration. This work has as objective to show the main surgical complications that can appear in the moment of implants placement as: immobilization lack, drilling of the cortical inferior of the jaw, the nasal cortical and/or sinuses, intra-bone fractures of the drills, dehiscence, fenestrations, mandibular fractures and swallow instruments or components. Besides presenting the prevention forms and treatment of those complications we will show, by mean a retrospective analysis of 100 patients, witch complications were most common.

216. Platelet rich plasma: a source of autogenous growth factors

MESSORA, M. R.; SAITO, C. T. M. H.*; MELO, W. M.; MARIANO, R. C.; NAGATA, M. J. H.

Tissue engineering is a multidisciplinary field concerned with regeneration of the form and function of injured tissues using biologic mediators and matrices, as well as synthetic polymers, to facilitate the initial healing process. Recently, new knowledge about the mechanisms involved in the regeneration of specific tissues, including bone, has become available. One approach for the treatment of large bony defects is to optimize the effect of growth factors contained in platelets through the use of Platelet-Rich Plasma (PRP). PRP is obtained from autogenous blood using the principle of cellular separation by differential centrifugation. The resultant sequestration and concentration of platelets and their growth factors can be used to accelerate bone regeneration. The edentulous posterior maxilla is associated with a variably pneumatized maxillary sinus and often has extensive loss of the alveolar process. The combination of these two anatomical features can make rehabilitation with osseointegrated implants very difficult. Therefore, the purpose of this presentation is to outline the sequence involved in obtaining and using PRP as well as the surgical preparation of the receptor site in the maxillary sinus elevation procedure. In addition, the advantages and disadvantages of a number of graft materials available for grafting the sinus cavity and the benefits obtained with the use of PRP will also be discussed.

217. Clinical and radiographic evaluation of the success of the alveolar distraction osteogenesis technique in the reconstruction of atrophic alveolar ridges

ALLAIS DE MAURETTE, M.*; STABILE, G. A. V.; MOREIRA, R. W. F.; MAZZONETTO, R.

The aim of this study was to evaluate clinical and radiographically the alveolar distraction osteogenesis technique (ADO) and the possible complications presented during the treatment. Fifty-five patients were submitted to the alveolar reconstruction with distraction osteogenesis, using an intraalveolar distractor - 50,90% were operated in the posterior mandible area; 40% in the anterior maxilla; 5,45% in the anterior mandible region and 3,63% in the posterior maxilla. The mean real bone gain for each region was 7,46 mm; 4,49mm; 6,09 mm and 6,32 mm respectively, with a general mean of 6,09 mm. The complications presented during the treatment were minor in 23 patients (43,39%), and major complications in 5 patients (9,43%). The technique of ADO demonstrated to be effective in the reconstruction of atrophic alveolar ridges with a success rate of 90,57%, presenting minor complications that can be solved with an opportune attendance by the professional.

219. Pediatric maxillofacial trauma: experience of 315 cases

GIANCRISTÓFARO, M.*; GOMES, P. P.; PASSERI, L. A.

The purpose of this study was to evaluate all patients 16 years or less who suffered maxillofacial trauma, attended in Piracicaba Dental School – Unicamp, Division of Oral and Maxillofacial Surgery from January, 1999, to June, 2004. Etiologic factors, kind of facial trauma, associated trauma, treatments and complications and its gender and age relation were analyzed. Three hundred and fifteen pediatric patients were attended; 114 (36.19%) were victims of falls and 102 (32.38%) of bicycle accidents. One hundred forty two (40.69%) suffered soft tissue injuries, and 111 (31.81%), dentoalveolar injuries. Mandible were the commonest site of fracture with 39 (11.17%) cases, followed by nasal fractures with 32 (10.15%) cases. 65.71% of patients had maxillofacial trauma only, but 69 (21.9%) had superior member trauma, 48 (15.23%) inferior member trauma and 23 (7.3%) head traumatism. Treatments complain suture until fracture open reduction and rigid internal fixation. Two patients presented complications requiring new intervention. There was boy predominance, with 208 (66.0%) patients. The most frequently affected ages were 7 to 10 years, with 76 (24.13%) patients and 11 to 15 years, with 78 (24.76%) patients. Pediatric maxillofacial trauma was frequent in the study period with 70 cases per year, the more complex cases occurred in 30.5% of all.

221. Internal fixation of sagittal ramus osteotomies

ABUABARA, A.*; CORTEZ, A. L. V.; MORAES, M.; PASSERI, L. A.

The bilateral sagittal split osteotomy is commonly used to treat mandibular prognathism and retrognathism. The operation is excellent for sagittal corrections but also can be used for the treatment of minor anterior open and deep bite and mandibular asymmetry. Multiple bicortical screws, monocortical screws and miniplates and the association of the techniques are described for internal fixation. This work shows two cases of internal fixation after sagittal ramus osteotomies. The first case presents the technique using bicortical screws and the second case using miniplates and monocortical screws. The two different methods of rigid fixation of the mandible after bilateral sagittal split osteotomy are very stable. It is therefore the choice of the individual surgeon to use either method of rigid fixation, because as both seem to provide equal comfort and reliability.

218. The use of bone morphogenetic protein (BMP) in implantology

HOSHINO, K. L.*; MAURETTE, P. E.; ALBERGARIA - BARBOSA, J. R.

The implantation procedure has the prerequisite the quality and amount of bone to allow the support of the osteointegration. The recent advances in the knowledge of the bone physiology, in the concepts of immunology, the procedures of bone storage and in the surgical principles, have made possible the trustworthy uses of the substitute of autogenous grafts in the reconstruction of the bone defects. The Bone Morphogenetic Proteins (BMPs) it plows the group of hydrophobic glycoprotein acid, members of the family of growth factors, that exist in the extracellular bone matrix and have been extracted from different tissues, like bone and dentine, and from adds species (rabbit, ox, goat, rat, baboon and human beings). The BMP acts in immature mesenchymals cells in the beginning of the bone induction by means of endochondral bone differentiation, and goes this reason have been studied the cap substitute material with bone-inducing properties. The association of BMP to other biomaterials (the organic bone, membranes of collagen, etc.) it allows the formation of the complex that favors cellular differentiation allowing the reconstruction of bone defects. The aim of this work is to present the main characteristics of BMP and his uses in implantology like substitute of the autogenous graft in the reconstruction of bone defects. This study indicate that the rate of osteointegration is increased by BMP.

220. The importance of diagnosis of the carotid cavernous sinus fistula, associated with mandibular fracture.

NETO, E. G. C.*; BERENGUEL, I. A.; JORY, M.; KURAMOCHI, M.M.; VANTI, L. A.; TAPIA, D. M. M.; ZANGRANDO, D.; FRANCISCHELLI, T. L.

The carotid cavernous sinus fistula (CCSF), is an uncommon complication in a closed facial trauma. The development of the CCSF, may occur for several weeks or even months post trauma. Clinical examination may reveal: pulsatile exophthalmos, subconjunctival chemosis, abducens nerve palsy, resulting in incapacity of lateral movement. The patient reports many times "buzzing inside the head". The carotid angiography is the first choice of exam to confirm diagnosis. The treatment choices are embolisation by means of muscle fragments or balloons; ligation of the common, internal or external carotides arteries in the neck; clipping of the internal carotid between the cavernous sinus and Circle of Willis. After ablation of the fistula, the vision acuity and the ocular movements improved and the proptosis is already much reduce. The knowledge of the signs and symptoms of the CCSF are essential for the maxillofacial surgeon to be able to conducting multidisciplinary cases associated with neurosurgery and vascular surgery staff.

222. Evaluation of the effectiveness of collagen and cellulose membranes in the treatment of bony fenestration defects

OLIVEIRA, M. U.*; LOPES, M. C. A.; ALBERGARIA-BARBOSA, J. R.

The aim of this investigation was to evaluate the effectiveness of collagen and cellulose membranes in the treatment of bony fenestration defects associated with dental implants trough histologic, histometric and biomechanical analysis. Three 9.0 X 3.5mm titanium implants were placed in the tibia of six dogs. Circular defects with diameter of 5mm were made in the medial face of the tibia, in order to expose implant surfaces. The first and second defects were treated with collagen and cellulose membranes, respectively, while the third defect was used as control. After the period of three and eight weeks, the animals were sacrificed and submitted to the torque test. Through biomechanical analysis, it was observed that the force applied to break the bone/implant interface increased in fuction of time of follow-up. Differences statically significant were observed between of treatment the forms. The histometric data revealed a greater bone neoformation in the defects treated with collagen membrane

223. Patients with special necessities of interest for odontology: one present classification

LELIS, B. C.*; CASTRO, C. G.; RODRIGUES, M. M.; ANTUNES, R. M.; RINK, M. C. M.

The "bonanza patient" term was used for many decades to assign carrying individuals of deficiencies physical and/or mental. However, with passing of the years, this assignment finished for it becoming pejorative, restricted and extremely limitant, therefore these same years had brought the necessity of a terminology not so restricted, not bad and, consequently more including, or either, that it incorporated in its concept other shunting lines of the normality standards, beyond those relative ones to the deficiencies physical and mental. Them, in the decade of 50 this concept starts to move with the introduction of geriatric patients in the classification of special carrying patients of necessities. In this work was presented a modern classification, brought up to date with the new concepts of especiality, described for Mugayar, L., of interest for professionals of the health, also dentistry.

225. Evaluation of the effect of the gum to chew with xylitol in relation to the development of dental caries

CASTRO, C. F.*; COELHO, E. B.; COELHO, L. G. C.; BARUD, H. S.; NOGUEIRA, I.

The dental caries is a multifactor illness whose development is associated with the interaction of three main factors: susceptible host, specific cariogenic diet and oral bacteria. There are researches that prove the relation of the consumption of sucrose with the prevalence of caries, being necessary the adoption of writs of prevention, aiming at its control and maintenance of the buccal health. Xylitol is a natural carbohydrate, with similar taste to the one of sucrose and that he has been considered with a not cariogenic substitute of the sugar. The gums to chew are consumed habitually and they have sugar in their composition. The frequency of ingestion and time of permanence in the mouth causes deleterious effect to teeth. The objective of this work has to present a revision of literature regarding gums to chew with xylitol and its effect on the development of caries. Analyzing the articles was verified that the gums with xylitol help in the process of remineralization of incipient injuries and in the increase of the salivary flow. Besides that, xylitol promotes changes in the metabolism of the S. mutans and its reduction in the plaque.

227. External control of fluoride levels in the public water supply in Piracicaba.

AMARAL, R. C.*; SOUSA, M. L. R.

The water fluoridation is the main measure for the prevention of the dental caries, however, if this is not within adequate values it will not bring benefits or it can even cause damages instead of benefits. Thus the objective of this research was to analyze the fluoride concentration of public water supplies from the city of Piracicaba. The samples was composed of 35 points of collection (EMEI's of the city) to give representatives to the results. The water was collected in duplicate by health agents and analyzed by the electrode Orion 96-09 and an ion analyzer EA-940, previously calibrated with standards of 0,125 to 1,0 ugF/ml, with 1,0 ml of TisabII, or either, 50% TisabII. In the water samples, 100% were, in the period from April till July of 2004, within values considered adequate. However, there were some values higher and lower than those considered adequate (0,97 ppm F - 0,10 ppm F). From this results it can be concluded that it is necessary a continuous external control of the fluoride concentration in the public water supplies of Piracicaba.

224. Evaluation of the oral health of elderly patients of a vaccination of the city of São Carlos – SP

PIANCA, A. L.*; MASSUCATO, E. M. S., DOMENICONI, M.

The goal of this work was to take effective an epidemiological survey about patients attended during a National Vaccination Campaign and Buccal Cancer Prevention in old-aged people at the São Carlos city's Health Post. To accomplish this work was necessary to raise clinical basis in of specifics file that were amount to a total of 333 patients in 2002 and 645 patients in 2003; and the obtained basis were stored and analyzed in simple percentage taking into consideration the alterations' repetition in Buccal mucous and they were statistically analyzed by the EpiInfo 6.04 Program. We diagnosed lesions in 42 patients (13%) in the year of 2002 and in 65 patients (9,9%) in the year of 2003, which in the year of 2002, 2,7% of the patients presented suspicion of malignity and in the year of 2003 also 2,9% of them presented the same board. From the total of the patients just 21 (6,4%) and 42 (5,5%) looked for the Referential Health Post to determinate the final diagnostic and treatment. The most common lesions were: followed by irritative hyperplasia (20 of the cases), Candidiasis (5 of the cases), traumatic ulcer (4 of the cases) and equamous cell carcinoma (3 of the cases). We concluded in this work that was possible to line down an epidemiological profile of this group of people in order to establish the necessary measures to reach the patients' totality besides to sign some strategies to concretize the prevention, the early diagnose of Buccal Cancer and the elaboration of more efficient and reachable campaigns.

226. Buccal epidemiologic studies of the institucionalized elderly

TONOLI, M. L.*; FERRARI, F. L.; TIBÉRIO, D.; FARAC, R. V.

The elderly population increase in the world is a reality. Research shows the raise of the world-wide elderly population life expectation. The Brazilian Institute of Geography and Statistics estimates that the elderly people number in the Brazil in the next 20 years will be 30 million. Other important data is the retention of natural teeth among older adults increase, in other words, people are living more and with more natural teeth and this fact trends to continue. Due to the degenerate chronic disease presence, reduced functional capacity and oral care difficulty, the institutionalized elderly needs a different dental services and a large approach. With the purpose to know the reality of this population oral conditions, Geriatric Odontology Department professionals of the São Paulo Association of Dental Surgeon evaluated the oral conditions of the 48 institutionalized elderly people among 65 and 98th years old of the certain São Paulo City Asylum. It was verified that 77.09% are toothless and 22.91% have teeth with different degrees of the conservation and hygiene. These data evidence the poor dental care of this elderly population and justify the necessity of an intervention by a dental surgeon, which needs to be technical and scientific due prepared.

228. Buccal health promotion in older students

MORAES, M. A. C.*; QUELUZ, D. P.

The objective of the study was to understand, through the older students' speeches, like they value your buccal health and your children's buccal health. The methodology consisted of an interview through a questionnaire to 49 people with age group from 18 to 53 years (24 female and 25 male) from two schools in the city of Piracicaba-SP. The interview was accomplished before them attending the dental lecture, addressing the content to be discussed with small groups in agreement with these students' interest. The collected data were submitted the statistical analysis. It was observed that the students majority felt toothache (87,5%), the parents taught about tooth brushing (59,2%), brush the teeth three times a day (34,7%), know little about decay and fluoride. The results suggest that the knowledge of the group that attending the educational program is in progressing with the intention of motivating the students to act, respecting your particularities; it is also emphasized the need of the accompaniment of them.

229. Reduction of dental caries prevalence between 1971 and 2001 in Piracicaba-SP.

PEREIRA, S. M.*; MENEGHIM, M. C.; PEREIRA, A. C.; ASSAF, A. V.; KOZLOWSKI, F. C.; MENEGHIM, Z. M. A. P.; AMBROSANO, G. M. B.

This study aimed to analyse the prevalence of dental caries in Piracicaba-SP, through epidemiological surveys performed between 1971 and 2001. Piracicaba has had fluoride in the public water supply in satisfactory concentrations (0.7 ppmF) since 1971. The six epidemiological evaluations (1971, 1977, 1980, 1992, 1996, 2001) were performed according to WHO criteria. The results showed a decrease in the DMFD index of 78.84% in thirty years. In 2001, 41.8% of children were free of caries. The results of this study showed an effective reduction of dental caries during the last 30 years in 12-year-old children of Piracicaba.

230. Buccal Health Model in Campinas - PAIDEIA Program

CERAVOLO, M. C.*; QUELUZ, D. P.

The purpose of this study is to present the new model in Campinas-SP-BR, denominated PAIDEIA, focusing the buccal health of the district. The PAIDEIA program of Family Health has as objective works with an enlarged concept of Family, group that co-inhabits a same space, enlarging the support nets among the teams, the families and other organizations. The general characteristics of Campinas in the attention to the buccal health are: system of public water fluoridation (98%); it was reached the goals stipulated by WHO of DMFT to the 12 years in the year 2000, 257 dentists, 16 dental hygienists, 135 dental assistants, 45 units all with dental services, 110 dental chairs, tends 33 buccal health teams, being 25 teams of the modality I and 8 teams of the modality II. The system of individual and collective procedures are accomplished directly in the units, through SIGAB the system of information used by the health service, among others. Conclude that Campinas is accomplishing important efforts to implement SUS, proposing a calendar of collective buccal health in construction in municipal level, and PAIDÉA has been presenting if as a promising model.

231. Use of two indexes of self-perception: quality of life x oral health in elderly

SILVA, E. F. A.*; SOUSA, M. L. R.; NERI, A. L.

To evaluate the oral and general health through self-perception indicators is important in the verification of the quality of perceived life. The objective of this research was to search for relationship between self-perception of global satisfaction with life and the oral quality noticed in the elderly 60 years of age or older. It was a pilot study (n=10) which used the index GOHAI (Index of Determination of the Oral Health Geriatrics) that is composed of 12 questions that queries the 3 domains (physical, psychosocial and pain) with a 36 at the final score that can vary by 12. The responses classify the quality of high perceived oral health above 34 points, low perceived oral health below of 30 points and average report between these values. Was it also used the Scale of self-evaluation of Cantril (what does measure the global satisfaction with the life) through the subject "Which the value that you give to your satisfaction with your own life"?, with punctuation from 1 to 10, being considered above 6 how positive. The average of age of the respondents was of 72,3 years with male and females equally divided. The results concluded that 80% of the elderly (4 men and 4 woman) classified their global satisfaction with life positively. However, 60% of the elderly (2 men and 4 woman) classified their oral health as low, and of these 83,3% they still classified positively the global satisfaction with the life. The data suggest that, despite the elderly reporting that the quality of their oral health was unsatisfactory, this didn't interfere in their reporting high global satisfaction with life.

232. Social representation of the buccal health

MOLINA, V. L. I

This study showed the social representations on buccal health, organized by the patients of the Integrated Clinic of the FOSJC - UNESP. It was adopted interview for the collection of data together with 77.5% of the population-target and the analysis of content for the understanding of its representations. The significant results are: (1) partner-economic profile: the majority is woman, married, white, with medium school complete, work income of 2,5 the 3 minimum wages; (2) the used pointers of buccal health had been: maintenance of teeth treated, well-taken care of generalities to prevent the halitoses and regular visits to dentists; (3) 43 % of the patients find satisfied and happy with its teeth and 69.9% evaluate its buccal condition as "regular", to be in treatment and to have been guided with the persistence and punctuality of the professionals; (4) they recognize that the dental loss is due to lack of treatment (78,5%), do not relate it to lack of prevention; (5) they understand for buccal health the maintenance of cleaning teeth, the regular visit to the dentist, brushine and the use of dental floss. One concluded that the patients auto-evaluate with good buccal health without references to the municipal politics of health and the difficulties of access to the public services. The buccal health does not relate with the universal right of the citizen, nor with the duty of the State and, much less, with the individual and collective capacity of carrying through as citizen. Its representations seem to be related: to practical, the manifest ones for behaviors, habits and crazes and, to the affection, demonstrated for the satisfaction of the expectations. Farless of the concept of buccal health therefore, this is understood for beyond the morbid processes, a time that if relates to the concrete conditions of existence, where health-illness is produced.

233. Napra Project - attendance and promotion of health for the marginal population of the Amazon Region

SILVA, B. B. F.; FERREIRA, D.; FRANÇA, I. P.; MENEGHIM, M. C.; RIGATTO, H. M.

The NAPRA (Nucleus of Support to the Marginal Population of the Amazon) is a non-profit organization that acts in three fields: education, health and technology in the region of the lower Madeira River (RO). The two main objectives of the program are to promote better life condition to the population and to form socially responsible professionals. The dentistry team acted with 4 surgeon dentists and 10 academics divided into landed and boat-hospital teams. Attending to 973 people, aged between 4 and 60 years old, in 18 days, 8 hours per day, with curative activities (exodontias, restorations, ARTs and root scaling), preventive (topic fluor, sealants, cariostatic and NaF mouth washing), health education (domiciliary visits, lectures) and survey caries epidemiologist. Results: DMFT index in the age band of 5-6 (4,86); 7-10 (3,46); 11-13 years old (3,26). In average 8,27 procedures/professional/day had been carried out (preventive/curative); 25 domiciliary visits with emphasizing breastfeeding, water treatment and elimination of mosquito focus; 5 lectures to 120 people and distribution of 3000 toothbrushes. In conclusion, the project plays an effective role in the elimination of accumulated needs and on deepening the health promotion; for the professionals, a differentiated formation based on an intense workgroup experience and the facing of a different working environment.

234. Anterior open bite: how the general practitioner can intermediate.

VIDOTI, B. A.*; POLETI, M. L.; CASSIS, M. A.; SANTOS, A. F. V.; BRANDAO, A. G.; ANGELIERI, F.; ALMEIDA, R. R.

Anterior open bite is characterized by the presence of negative overbite between the maxillary and mandibular anterior teeth. The main etiologic factors comprise mechanical obstacles to dental eruption such as sucking habits and tongue thrusting, which lead to establishment of dental or dentoalveolar anterior open bite. The anterior open bite is considered skeletal when there is vertical skeletal discrepancy associated to a vertical growth pattern. The treatment comprises identification of the deleterious oral habits involved and intervention, generally by utilization of fixed or removable tongue crib. The treatment is usually multidisciplinary, comprising Orthodontics, Otolaryngology, Psychology and Speech Therapy. A case report will be presented for explanation of the adequate diagnosis and approach for anterior open bite accessible to the general practitioner.

235. Diagnosis and early treatment of the posterior cross-bite.

CASSIS, M. A*; ALMEIDA, R. R.; BRANDÃO, A. G.; ANGELIERI, F.; POLETI, M. L.; VIDOTI, B. A.; SANTOS, A. F. V.

Posterior cross-bite is characterized by transverse deficiency of maxillary dental arch. It occurs in early ages, mainly due to deleterious oral habits. Even when these habits are abandoned during craniofacial growth, posterior cross-bite is not corrected without the proper treatment. The early treatment of the posterior cross-bite is essential when it is diagnosed, though the child must have the sufficient maturity to receive the treatment. The treatment consists of employment of removable (plate with expansion screw) or fixed (quadrihelix, bihelix, Haas and Hyrax) expansion appliances. The correct diagnosis and the treatment of the posterior cross-bite will be described with one case report, stressing the early treatment performed by the general practitioner.

236. Posterior Crossbite Treatment with Quad-Helix and Space Control

MORAES, M. L*; SAKIMA, T.

The Posterior Crossbite is a malocclusion characterized by a transverse deficiency in maxillary arch. It is classified as dental, functional or skeletal, unilateral or bilateral and is associated to several etiologic factors, such as overretained primary tooth or root, ectopic eruption, inadequate habits, sleeping position, respiratory problems, occlusion interferences and hereditary factors. The complexity of each case depends on the etiologic factors and patient's age. Growth in transverse dimension slows earlier than in the sagittal or vertical dimension, and this support the need for early treatment. Early treatment also prevents associated mandibular dysfunction and facial asymmetry caused by posterior crossbites. The aim of this work is to provide information on posterior crossbite treatment. The management of a clinical case treated with quad-helix and space control is presented.

237. Importance of the early treatment of impacted mandibular permanent canines

POLETI, M. L.* ; VIDOTI, B. A.; SANTOS, A. F. V.; CASSIS, M. A.; BRANDAO, A. G.; ANGELIERI, F. ; PINZAN-VERCELINO, C. R. M.; ALMEIDA, R. R.; PINZAN, A.

The orthodontic treatment addresses the occlusal alterations from the deciduous to the permanent dentition. Tooth impaction may occur during this transition period. Canines are the teeth most frequently affected by impaction, followed by the third molars, affecting 2% of the population. Early diagnosis should be performed by means of periapical, occlusal or panoramic radiographs; the latter provides information on the relationship between the canine and the adjacent teeth, its inclination and degree of root formation. After the adequate diagnosis, therapeutic measures should be established in an attempt to prevent retention of the impacted canine, such as extraction of the predecessor deciduous canine when the permanent canine presents half to two thirds of root formation, leading to normalization of its eruption pathway. In the permanent dentition, or when the early treatment is unsuccessful, there are two possible therapies: extraction of the retained canine or repositioning in the dental arch by surgical-orthodontic procedures. This work aims at presenting two case reports on which the patients presented two impacted mandibular canines. One case achieved satisfactory outcome due to the early approach, whereas the other required extraction of one permanent canine due to the late diagnosis.

238. Serial extractions: advantages and indications

SILVA, G. F. B.*; BELTRÃO, R. T. S.; FREITAS, M. R.; HENRIQUES, J. F. C.; JANSON, G. R. P.; PINZAN, A.

In orthodontics, serial extraction can constitute a valuable therapeutic procedure. Although it has limited indications it can reduce treatment time with fixed appliances, providing facial harmony in patients with teeth-bone discrepancies. It requires correct diagnosis and treatment planning in the beginning of the mixed dentition, in which the therapeutics is applied. Therefore, it is essential to know craniofacial growth and development, as well as the contraindications and limitations of the procedure, so success can be reached. To illustrate the procedure, a case report of a six years and nine months old patient, with Angle Class I malocclusion, a convex facial profile, vertical growth pattern, whose main complaint was the absence of spaces for eruption of the permanent teeth, will be presented. The first teeth to be extracted were the maxillary deciduous canines, followed by the first deciduous molars and the maxillary and mandibular first premolars. Orthodontic treatment time with fixed appliances was small, lasting only five months. The case finished in normal molar relation, with a satisfactory occlusion and profile.

239. Maxillary interincisal diastema

GOES, D. R.*; SAMPAIO, L. P., MELOTI, A. F, RAVELI, D. B

The gap or lack of contact between the proximal surfaces of adjacent teeth is known as diastema and it can occur in both dental arches. Commonly, it is noticed between the upper central incisors, generating a major aesthetic and functional concerns. The presence of a maxillary central diastema has been attributed to a number of etiological factors, such as abnormal frenum with low insertion point, midline pathology, missing or undersized upper incisors, supernumerary teeth, oral habits, ethnic and familiar incidence. Midline diastema is also considered normal during primary and mixed dentitions, and, facing the several etiological factors that can determine its presence, a careful diagnosis is extremely important before treatment. The purpose of this study is to present a short literature review on maxillary interincisal diastema in which will be addressed the various etiological factors, incidence and possibilities of treatment, followed by several clinical cases treated with fixed and removable appliances.

240. Treatment of low atypical swalling by NOUER's dispositive.

ANTONIALI, E. O. *; MAGNANI, M. B. A.; NOUER, D. F.; UGLICK, I.

The atypical swalling is considered one of the most common of the noxious buccal habits interfering in the establishment and maintenance of a good dental occlusion. It embraces balance of the responsible neuromuscular for the breathing, suction, mastication, swalling and speaking. The language is inside a powerful muscular organ of the buccal cavity, tends the power to alter the position of the teeth and of the adjacent structures. The atypical swalling is classified in agreement with the lingual interference, being able to her to be high, average or it lowers. The low atypical swalling if it characterizes through the lingual atypical pressure in the inferior teeth, presenting as characteristics clinical spaces, inclination of the inferior incisors, forms of the inferior arch more enlarged, also being able to, to present a picture of open bite. Therefore the precocious intervention through the correction of the pattern of the posture. The objective of the present work consists of the presentation of a clinical case of an individual with atypical lingual positioning in the tongue area by using a NOUER plate dispositive.

241. The Nouer's Appliance as treatment of anterior open bite

YARID, M. C. D.; NOUER, D. F.; PEREIRA NETO, J. S.; LUNARDI, N.; QUEIROZ, V. S.; VIOTTI, A. O.;

The purpose of this study was to highlight the importance in diagnosing the anterior open bite. The Nouer's Appliance, indicated for low position of tongue, was used to treat this dysfunction, promoting adequate eruption and position of teeth as well as the elimination of atypical swallowing. This work describes a clinical case and the manufacture of the Nouer's Appliance in different laboratorial phases. This treatment was observed to promote buccal harmony as well as functional equilibrium to the Stomatognathic System.

243. Orthodontic treatment of anterior maxilo-mandibular discrepancy: a clinical of the face

LOPES, A. C.*

The orthodontic treatment in patients who present radiographically all the truth, during growth period, helps in a better prognostic, proportionating a conservative treatment. In the clinically treated case, it was observed a maxilo mandibular discrepancy in a nine years old patient, with mixed denture. Angle Class I malocclusion accentuated vertical growth and anterior maxillary constriction caused by the lack of the upper permanent lateral incisors. The mandibular arch presents a slight incisor crowding with incisors vertically positioned. Esthetically, the naso-labial angle presents itself adequate, however, the inferior lip presents itself flaccid, preventing its own sealing. With the aim of maintain adequate the canine relation and posterior occlusion, the clinical treatment was courageous. Using the positive factors of the aegnesy (manutention of facial esthetics given by maxilla), the mandibular esquelitic growth was controled through the two mandibular central incisors extraction proportionaling muscular balance and a harmonious dental and esqueliticelation.

245. Transversal maxillar deficiency. Diagnosis and treatments alternatives

HUNG, R. E.; CASTELLANOS, E. G.; MAURETTE, P. E.; ALLAIS DE MAURETTE, M.; PEREIRA NETO, J. S

Nowadays, the malocclusion treatment in adults is frequently more complicated by the transversal deficiency. This multifactorial alteration involves congenital, developmental, traumatic and iatrogenic factors. The single orthodontic treatment of the transversal maxillar deficiency can be done in patients that haven't reached the craniofacial maturity, but is impossible to do in adult patients that have reached total bone maturity. For the latest, the treatment is based in the fast maxillar expansion (FME) which is defined as a procedure that allows the establishment of a correct transversal bone dimension by the medial palatal suture rupture (osteotomy) through orthopedic forces applied with the activation of the orthodontic device. This article reviews the main characteristics of the maxillar transversal deficiency and the technique applied in the correction of this alteration in growing patients and in adults that have reached total bone maturity.

242. Maxillary changes and stability after RME with Hyrax appliance evaluated in posteroanterior radiographs

ARAÚJO, M. A*, SANTOS-PINTO, A.; MELOTI, A. F.; BARRETO, G. M.; GANDINI JR, L. G.

This paper evaluates the maxillary transverse changes caused by the Rapid Maxillary Expansion (RME) accomplished by Hyrax appliance. 16 children from both gender were selected, with ages between 7.7 to 10.8 years, who presented unilateral or bilateral posterior crossbite, that was treated with RME using the Hyrax appliance, activated ¼ turn twice a day during 3 weeks until achieve overcorrection of the transversal size; then the appliance was stabilized totalizing 4 to 9 months of treatment (x=5,43). Afterward, the appliance was removed and a retention was inserted for 6 to 19 months (x=14 months). Routine postero-anterior telerradiographs were taken at the beginning, end and post-retention of treatment, measuring these variables: the intermolar distance (IMD), measured in the most external part of the bucal surface of molars, interincisal (IID), measured on the mesio-incisive angle of the central incisors, interapex (IAD), measured on the central incisors apex and the interincisors inclination was measured using the mesio-incisive points and the apex of the incisors (IIA). The treatment promoted an average opening of 8,8mm of IMD, 2,33mm of IAD and none of IIA (-0,1mm) that reflected in a toe-out from incisal to radicular of incisors of 5,64°. At the end of retention fase, return movements were observed, with a decrease of 4,3mm of IMD, 1,23mm of IAD, a non-significant enlargement of IID (0,38mm) resulting in a decrease of 2,88° in incisors toe-out. These results confirm the significative influence of Hyrax appliance on transverse dimensions, represented by enlargement of IMD and IAD that tend to return approximately 50% at retention fase. The incisal area didn't present significant opening due to reapproach caused by periodontal and gingival fibers' tension during stabilization period of treatment. Thus, it's recommended to achieve an overcorrection in RME, when the HIRAX appliance is used and some cautions are necessary on the retention period to avoid a bigger return grade than expected.

244. Individual facial mask making proposed by Turley: laboratorial and clinical procedures

CANIATTO, C. W.*; RIBEIRO, R.

The main objective of this paper is to demonstrate the clinical and laboratorial procedures of single facial mask making proposed by Turley, with some changes. First the patient's face impression is done and this individuality leads to more reliable results, allowing better effectiveness and stability for the treatment and more comfort for the patient. Clinical stage beginning with the preparation of the patient, for facial modeling the patient's eyes were protected with water moistened cotton wool and cream Vaseline was spread on the patient's face to prevent the alginate from sticking. After that the facial modeling was done, preparing the alginate and putting it on, leaving the nostrils free for air. After this had been done, moistened plastered bandages were put and adept. Finishing the bandage setting the model was taken off. It was then sent to the laboratory where the plaster is taken off immediately. Laboratorial stage, after the removal of the plaster we obtained a model that reproduced the face where at first the, making the side wire structure connecting the chin to the forehead, it was made acrylical supports involving the chin and the forehead region, wire was soldered on both sides to the metallic framework, and solder were trimmed and polished. The objective, with a perfect adaptation, giving stability and holding it still, it contributes to a more clinical effectiveness and less working time.

246. Treatment of the posterior cross-bite in the decidual dentition.

CASTELLANOS, E. G.; HUNG, R. E.; MAURETTE, P. E.; ALLAIS DE MAURETTE, M.; PEREIRA NETO, J. S

Children who present with a posterior cross-bite in the primary dentition may be predisposed to long-term detrimental consequences if the condition is left untreated. Controversy exists in the literature as to the most appropriate time to treat this condition. Posterior cross-bites in the primary dentition are relatively common and their causes are numerous. Because a significant proportion of posterior cross-bites self-correct beyond the primary dentition, routine correction in the primary dentition phase cannot be advocated. The aim of this review is to evaluate the need for correcting posterior cross-bites in the primary dentition based on the current understanding of the etiology, likelihood of self-correction, and consequences of various forms of this malocclusion persisting into the mixed and permanent dentitions. A review of the reported treatment options for management of this condition is also presented.

247. Correction Class II malocclusion, division 1 with Removable Extrabuccal Appliance in Twin-patients-Clinical Case Report.

GREHS, B.*; MARTINS, L. P.; GREHS, R. A.; ABDALA, A. M.; CIRELLI, C. C.

Class II malocclusion is frequently considered a manifestation of maxilo-mandibular discrepancy in antero-posterior that can present skeletal components how maxillary protrusion or mandibular retrusion or both association and dentoalveolar how vestibule position upper incisor or verticalization lower incisor with consequent higher overjet. Class II malocclusion can to be associated problems in vertical dimension how openbite or deebite and transversal how crossbite. Among malocclusions, Class II represent higher prevalence in the people who search Orthodontic treatment. The patients have showed the vertical growth and convex profile. The objetive case reporter avaiable with twin-patients with malocclusion of Class II, division 1 utilized removable extraoral appliance with high pull.

248. Correction of posterior crossbite with Haas appliance

AMARAL, R. M. P.; GANDINI, M. R. E. A. S.

In normal occlusion is fundamental a harmonious relationship between osseous bases, maxilla and mandible, in 3 direction: sagital, vertical and transversal. The superior dental arch should have larger dimensions than inferior. However we diagnosis with a some frequency the superior dental arch has a transversal dimensions minor, confer to maxilla a triangular form characteristic of arch constriction. The maxillary dental arch constriction culminate with a posterior crossbite. The early and preventive therapeutical for correction of the crossbite and maxillary dental arch constriction has been indicate enjoy growing stages. The therapeutics require the expansion of transversal dimensions of arch through orthodontics appliances as Quadri-hélice, Haas, Hyrax, between others. The purpose of that clinic panel is present the effectiveness of Haas appliance acting in transversal correction of maxilla.

249. Facial analysis during mixed dentition in individuals with anterior open bite

PANTOJA, C. A. M. S.*; PEREIRA NETO, J. S.

The aim of this research was evaluate the Ricketts golden proportions in 31 individuals in the mixed dentition through facial analysis. The sample was divided in two groups: (1) experimental group (n=16), with anterior opened bite children and (2) control group (n=15), with a good labial selament children, without deleterious habits and good incisal contact. The results were submitted to the student T test. By the analysis of the variables it was observed that there are alterations in all of the facial measures between the two groups. However, only in the measurement of eye joint was observed a significant statistical difference in the student T test. In the measurement of the labial selament (SL), it was found the mean value of 3.86 mm \pm 12.79 to the control group and 4.88 mm \pm 5.79 to the experimental group. These results demonstrated that the individuals with anterior opened bite presented a disharmony in the inferior third of the face, with labial incompetence, mainly associated with the increase in the thickness of the inferior lip. This can be attributed to the hipertonicit of the inferior lip and to the hipotonicit of the superior lip. No statistical difference was verified in the two groups for the golden proportion measurement. These results demonstrated equal facial proportions, according to the Ricketts methodology (1982), in spite of differences between the two groups.

250. Early treatment Class III malocclusion: a case report.

PRICOLI, J. J. F.*; QUEIROZ, V. S.; PEREIRA NETO, J. S.; NOUER, D. F.

The Class III malocclusion is characterized by a mandibular prognatism and/or by a maxilar deficiency. Etiology of this type of malocclusion can be genetic or environmental. Genetic factors may lead to a bigger mandibular growth or a smaller maxilar growth. When there is a desviation in the eruptive pattern causing the maxillary permanent incisor to erupt in a lingual position, an anterior crossbite results. This situation hinders maxilla development. Early treatment is fundamental to avoid future complications and possible orthognathic surgery. This paper presents an early orthodontic treatment through the use of removable appliance. The patient L.D.S., 9 years old, melanoderm, locked for dental and orthodontics treatment at Piracicaba Dental School. During the clinical exam deficient hygiene and poor oral condition were observed. Therefore restorative treatment and adequacy of the oral cavity were performed before orthodontic treatment. Afterwards, a new exam was done through plaster models, intra and extraoral photographs and cefalometric analysis. Was developed a removable orthodontic expansion appliance with helical springs and Ascher arc was chosen. This appliance was 1/4 turn activated weekly. After four months of treatment, total anterior uncrossing and harmonization of occlusion were observed and neuromuscular balance was achieve.

251. Evaluation of nasal growth in patients orthodontically treated

ORELLANA, B.*; SIQUEIRA, V. C. V.

The authors of the present study proposed verify longitudinally the nasal growth by measuring the vertical length, horizontal depth, size of the columella and sexual dimorfism in 40 youngsters from 12 to 14 years old. The sample was composed by 40 telerradiographs taken in lateral norm, from 20 males and 20 females all of them presenting a Class I Angle's malocclusion. The data was submitted to the repeated measures ANOVA statistical test. The results showed that there was statistical differences between sexes before and after treatment. The nose depth in girls increased from 30.1mm to 31.8 mm and 31 mm to 36.2 mm for the boys. The nose length ranged from 49.6 to 51.5 in girls and from 51.4 to 57.4 mm in boys, the nasal columella varied from 18.9 mm to 22.5 mm in boys while this measure was not statistically significant for the girls. It is possible to conclude that the length and depth of the nose in boys were bigger at the beginning of treatment e increased substantially in comparison to girls between 12 and 14 years old.

252. The syndromic characteristics of buccal breathing

RIBEIRO, R.*; CANIATTO, C. W.

The buccal breathing keeps a close relationship with the human beings normal physiological functions through its purification, heat and humidity properties. When there is an obstruction in the pharyngeal or nasal airways, caused by adenoid and tonsil hipertrophy, nasal septum deviation, allergic and chronic rhinitis among others, a breathing dysfunction may occur. In order to allow the air passage, the buccal breathing can cause postural alterations as jaw clockwise movement, resulting low and front forward position of the tongue which could, with the time, cause dento skeletal alterations as open bite, palatal in V form, extrusion, increase of the goniac angles and mandibular plane, overjet and overbite, besides facial alterations as absence of lip, vague facial expression resulting the "adenoidal facies". When you solve the problem of buccal breathing it can persist even if you have the adenoid removed or the nasal obstruction eliminated. It is necessary to reeducate the nasal breathing and reestablish the functional equilibrium.

253. Electromyographic analysis of orbicularis oris muscle in youngster with Class II, division 1 malocclusion and, normal occlusion

SOUSA, M. A.*; SIQUEIRA, V. C. V.

The purpose of this study was to compare electromyographically the action potential of the the orbicularis oris muscle, upper and lower segment, bilaterally, in youngster females with Class II division 1 malocclusion and with normal occlusion, in order to verify the occurrence or not of the electromyographic activity different between them. The sample consisted of 50 young girls, aged ranging from 8 to 10 years old, with no previous orthodontic treatment, divided into two groups: 25 girls with normal occlusion and 25 girls with Class II division 1 malocclusion. The electromyographic signals of the orbicularis oris muscle were acquired by passive surface electrodes of the Ag/AgCl. Muscle activity was recorded in resting position, in isometric contraction and in isotonic contraction and was determined the RMS values of each movement. The data collected was submitted to the statistical analyses of variance and Tukey test ($p=0.05$). The results showed that there was electromyographic activity different between the young girls with Class II division 1 malocclusion and with normal occlusion. That muscle activity was higher in young girls with malocclusion than in young girls with normal occlusion. This suggest the smaller competence lip in the girls with Class II division 1 malocclusion.

255. Overdenture attachment systems: dimensions and roughness after fatigue test.

BOTEGA, D. M.*; MESQUITA, M. F.; SINHORETI, M. A. C.; NÓBILO, M. A. A.; HENRIQUES, G. E. P.

The aim of this work was to evaluate de dimensional changes of attachment components (O'ring and Bar-Clip / Conexão and Lifecore) before and after fatigue test simulating 5 years of a denture usage. The samples (n=30) were divided in 6 groups (5 each): 1) O'ring/Conexão; 2) O'ring/Lifecore; 3) Clip/Conexão; 4) Clip/Lifecore; 5) Bar/Conexão and 6) Bar/Lifecore. The internal diameter of the silicone ring and the internal distance of the plastic clips were taken before and after the test, using UHL 100 microscope (20X). The metallic bars were submitted to a roughness test (SURFCORDER SE 1700 - 2.4 mm distance and 0.1 mm/s speed). Data were submitted to ANOVA and Tukey test ($p<0.05$). Groups 1 and 2 showed higher values after fatigue test, being statistically different (G1-1.3587; G2-1.3892 and control- 1.308 mm). The same way, groups 3 and 4 showed higher values after test, with difference (G3/before-2.0294; G3/after-2.105; G4/before-0.9536 and G4/after-1.3604 mm). Groups 5 and 6 did not show any difference between before and after (G5/before-1.3201; G5/after-1.0746; G6/before-0.8474 and G6/after-0.6758 μ m). The plastic components showed deformation due to the wear of removing and inserting the denture, increasing their dimensions. The metallic bar did not show superficial change.

257. The influence of mechanical brushing assay on surface properties of soft liners and acrylic resin

OLIVEIRA, L. V.*; MESQUITA, M. F.; HENRIQUES, G. E. P.; CONSANI, R. L. X.; SINHORETI, M. A. C.; NAKAOKA, M. M.

This study evaluated the effect of mechanical brushing on the surface of two soft liners (Luci Sof® and Sofreliner®) and one acrylic resin (QC-20®). Twenty samples of each material were prepared, measuring 25 X 14 X 3 mm. Ten samples of each material were submitted to the mechanical brushing assay, which was conducted on the MSet plus machine, at a rate of 5.0 stokes/second (300000 cycles). The surface roughness and observation in a scanning electron microscope were evaluated before and after the assay. The surface roughness was evaluated in a profilometer SE 1700 (Kosaka Laboratory); the observation in a scanning electron microscope (JSM 5600 PV model JEOL). Data collected were analyzed by a two-way ANOVA followed by Tukey's test (5%). When materials were compared, regardless of the effect of mechanical brushing, the surface roughness increased from smoothest to roughest in the following order: QC 20, Sofreliner, Luci Sof, there being significant differences among all materials (0.13; 0.31; 0.68 μ m, respectively). The mechanical brushing increased the surface roughness values of all materials significantly. There was no statistical difference between QC 20 and Luci Sof after mechanical brushing (0.88; 1.00 μ m, respectively), but they differed statistically from Sofreliner (7.74 μ m). Consequently, mechanical brushing had a deleterious effect on surface roughness of all materials tested.

254. Passive fitting in fixed prosthesis on osseointegrated implants - A case report.

CONSANI, R. L. X.*; NÓBILO, M. A. A.; MESQUITA, M. F.; HENRIQUES, G. E. P.

The fitting of the prosthesis is an essential factor for final success of the oral rehabilitation with osseointegrated implants. There are several factor influencing on fitting when casting understructure is used, as concerning to casting process, type of metal alloy, and understructure extension. For more extended and casted understructure, the recommendation is to saw and to solder the understructure in order to eliminate these difficulties, and to obtain a more acceptable fitting. However, the soldering of bigger metallic understructure in fixed partial prosthesis is a procedure, which may to introduce distortion and areas of mechanical weakness, situation also verified in the laser soldering. Using prosthetic components indicated for the passive fitting with immediate load, the purpose of this work was to show the use of the laser soldering as a satisfactory alternative for the cementation, with support of the passiveness in bigger structures with more biomechanical benefits, and longevity of the prosthesis retained by implants.

256. Oral and systemic health of institutionalized elderly in São José dos Campos.

SILVA, A. M*.; ALMEIDA, A. V.; MARCHINI, L.; CUNHA, V. P. P.

Considering the increase of institutionalization for elderly in Brazil and the important oral health in a general health report of these patients, so this work aimed verify the oral and general condition of elderly patients aged more than 65 who live in old shelter in São José dos Campos. Applying the ranged research and performing an oral clinical examination of these people, we noticed that from all the patients interviewed, 72% were in a doctoring treatment with 86% of that amount were taking some kind of medicine and the most prevalent systemic problems were: heart problem (28%) and diabetes (19%). Crossing the results of our research, it was noticed a valid and positive association ($Y=0.795$), between who takes some kind of medicine and xerostomy. Crossing the results between who has a motor problem and the frequency who brushes the teeth we found $\chi^2=8.40$ proving a positive correlation about this subject. It was verified the correlation between who received an instruction between prosthesis brush and the frequency among who brushes the prosthesis ($\chi^2=9.29$), it was demonstrated a positive association. The association between patients who wore some kind of prosthesis and patients that was with a hurt mucosa was $Y=0.1481$, is a valid and positive association. There wasn't association between who has diabetes and who has a gum problem ($Y=0$).

258. Electromyographic evaluation of clinical performance of the Nóbilo's balancing ramps

FERREIRA, D. F.* ; MESQUITA, M. F.; NÓBILO, M. A. A.; HENRIQUES, G. E. P.; CONSANI, R. L. X.

The eletromyographic evaluation has been a auxiliary instrument for evaluated the current physiologic alterations of complete denture's use. The aim of this study was evaluate alterations in the patterns of muscular activity in wearers of double denture balanced with Nóbilo's balancing ramps technique through electromyography activity. Twelve edentulous patients, free from signs and symptoms of TMJ's disorders and with at least five years of denture use had their old dentures substituted by new dentures, which were balanced with the use of the Nóbilo's balancing ramps. The evaluate muscles were the anterior temporal (AT) and masseter (M) in postural (RP) and maximal voluntary clenching (MVCP) position at four times: T0 - installation; T1 - 1st month; T2 - 2nd month; T3 - 3rd month. The electromyographic sign was collected in RMS with Myosystem I® and your amplitude was analyzed. A small alteration was record in the values of the electric activity for the AT and M muscles in RP. In MVCP was observed an inversion of the values in the electric activity for the AT muscle and increase of that for the M muscle with a light balance in the third month of evaluation. Significant statistical differences were not evidenced ($p>0.05$) in the evaluated times. It was concluded that the use of Nóbilo's balancing ramps didn't provide balance in the studied muscles.

259. Permanent deformation: effect of thermocycling and incorporation of citrate on composition of acrylic-based soft denture liner.

NAKAOKA, M. M.*; MESQUITA, M. F.; AMBROSANO, G. M. B.; HENRIQUES, G. E. P.; CONSANI, R. L. X.; OLIVEIRA, L. V.

This study evaluated the effect of the incorporation of citrate in a composition of acrylic-based soft liner (Eversoft®) on its permanent deformation. The samples were prepared by investing brass dies (12.7 x 19.0 mm) in a denture flask and the model impressed was filled up with soft liner. Forty samples were processed and divided into 2 materials (Eversoft® and Eversoft + citrate) and 2 treatments (with and without thermocycling) to 4 groups of 10 specimens each. The thermocycling was carried out in the machine MSCT-3 plus with cycles of 1 minute in water at 50C(±10C) and 1 minute in water at 55C(±10C), totalling 3000 cycles. The controls were stored in water at 37 0C for 24h. Permanent deformation was measured according to ADA specification 18. The results were submitted to ANOVA and the Tukey test (5%). The permanent deformation value (1.06 ± 0.30 Mpa) for the group without citrate, not submitted to thermocycling was statistically lower than that (1.82 ± 0.21 Mpa) observed for the group with citrate, not submitted to thermocycling. Thermocycling groups revealed permanent deformation values (1.36 ± 0.51 Mpa; 1.98 ± 0.18 Mpa, respectively) higher than those observed in the groups without thermocycling. Regardless of thermocycling, Eversoft with citrate groups showed the highest permanent deformation values. Thermocycling had a deleterious effect on the permanent deformation of both materials tested.

261. Dentigerous cyst: diagnosis and treatment (report of case)

SILVA, G. P.*; PEDROSA, E. F. N. C.; AZEVEDO, C. M.; FREITAS, D. Q.

Although the dentigerous cyst is the most common odontogenic cyst, its diagnosis must be confirmed by histopathological exam, because its radiographic aspect is similar to queratocyst and unicystic ameloblastoma. This study presents a case of dentigerous cyst of a male patient, 14 years old, that presented painless tumefaction in the left inferior molars region. In the panoramic radiography, radiolucent unilocular area was observed, whose size was 3 x 5,5 cm. There was severe radicular reabsorption of first molar and retention of second and third molar. The surgical removal of the injury was in hospital with general anesthesia. The histopathological exam indicated dentigerous cyst.

263. Erythema multiforme or Stevens-Johnson syndrome?

FELIZARDO, K. R.*; SOBRAL, L. M.; NAVARRO, C. M.; SPOSTO, M. R.

Stevens-Johnson Syndrome (SJS) and Erythema Multiforme (EM) are manifestations of the same disease. Drug reaction is one of the multiple etiologic factors. Clinical signs include mucocutaneous ulcerations, general malaise, fatigue, fever and prostration. In addition, complications of eyes, esophagus, pharynx, anus and vagina can set in. T.F.A., female, 12 years old, was attended at the Oral Medicine Service (OMS) complaining of "sore in the mouth and body". The history showed she had had gingivitis initially treated with Amoxiciline 20 days before. Amoxiciline was replaced with Cephalaxine with subsequent complication of the clinical condition. She was hospitalized for 2 weeks losing 10Kg and finally discharged from the hospital without improvement. The oral mucosa showed erythema, multiple painful ulcerations and labial malodorous hemorrhagic eschar. She presented lesions in the anogenital region of her skin and hands, hyperemic conjunctiva, breathless, fever, prostration and raucity. The cessation of Cephalaxine promoted cure. Based on the clinical evolution, the final diagnosis could be both EM or SJS. It is fundamental to the dentist know the biological behavior of the diseases, mainly those caused by drug reactions. The exchange with specialized centers on Oral Diagnosis, Oral Pathology or Oral Medicine is required to elucidate potentially lethal diseases.

260. The utilization of clip-bar and o'ring system in overdentures.

HERMANN, C.*; MESQUITA, M. F.; NÓBILO, M. A. A.; HENRIQUES, G. E. P.; CONSANI, R. L. X.

Since the failure of complete denture is closely related to the patient's loss of ability, reduced saliva flow, and bone resorption, attachment systems are needed to promote retention for teeth and dental implants—single (O'ring) or joined by a bar (Bar-Clip). The present study shows a clinical case using a maxilla complete denture and Clip-Bar mandibular Overdenture in dental implants: 9mm length and 3.3mm diameter. The O'ring system was replaced by the Bar-Clip system, because of an extensive divergence between the implants.

262. Bullous Pemphigoid in oral mucosa: a case report

JEREMIAS, F.*; MASSUCATO, E. M. S.; ONOFRE, M. A.; SPOSTO, M. R.

Bullous Pemphigoid is a chronic autoimmune disease with cutaneous and/or mucosas lesions affecting women frequently after 60 years old. Desquamative gingivitis is seen in 16% of cases and oral lesions are rare. The disease has a chronic course with remission and exacerbations. Patient T. F. G., 60 years, female, directed to Service of Oral Medicine with clinical history of "string striae in cheek and sick gingiva". Medical historic of allergy to quimical products, no vices and habits. Related, initially, white striae were present just on mucosa. Done biopsy, her doctor did not elaborate treatment, because it is a "incurable disease". Clinically, were seen bilateral ulcerations on mucasa, atrophic areas and withe striaes, an aspect of desquamative gingivitis with pain and bloody. Negative Nikolsky's sign the diagnosis hypotheses were: Pemphigoid and Lichen Planus. Maked incisional biopsy, Bullous Pemphigoid was histopatologic result. After periodontal basic treatment and teeth extractions the lesions were not better. Topic steroids was prescribed and after one week the lesions remissioned. The patient received instruction about plaque control, psicologic attendance importance and is being accompany in our Service.

264. Estomatologics effects of the radioterapy in patients with neoplasias of the head and neck

ÚBEDA, L. T.*; DEVIDES, J. D.; RUBIRA, C. M. F.; LAURIS, J. R.; BORTOLOCCI, A. G. J.; BUZZÁ, E. P.; DAMANTE, J. H.

Patients with neoplasias of the head and neck of the Hospital Amarel Carvalho de Jaú, treated with surgery and radiotherapy were submitted clinical and radiographic exam. The purpose was evaluate the oral conditions of the irradiated patients in the last 5 years. There were 24 women and 76 men, 59% with squamous cell carcinoma, 32% located in the mouth. The media dose of the received radiation was 5955 cGys, 89% of the cases were treated with dose above 5000 cGys. All the patients were submitted anamnese, physical exam, salivary flow rate, measure of the ph and ortopantomograph. In the anamnese, it was detected 30% with digeusia, 37% with disfagia and 68% with dry mouth. The edentulous were 43%, 9% had radiation caries and 29% had periodontal disease of the 57% dentate. In the stimulated saliva flow, 64% was below of the 0,7ml/min, 15% of them no got to collect saliva. The medium value of the ph was 6,97 +- 0,7. It was significant the correlations between pos-radiotherapy time and candidiasis and total dose of the radiation and mucositis. There was correlation also in the increase of the salivary flow in more pos-radiotherapy time. It was diagnosed two cases of the squamous cell carcinoma in irradiated and surgical site. There was not osteorradionecrosis. In conclusion the sequelas stomatologics of the radiotherapy are dependent of the dose of the radiation and of the pos-radiotherapy time.

265. Oral health evaluation of three elderly populations – preliminary study

WIEZEL, V. G.*; SPOSTO, M. R.; NAVARRO, C. M.

The increase of elderly populations indicates the need of the diagnostic to oral cavity changes related to aging. Objective: Analyze of oral health of institutionalized and no institutionalized elderly. We evaluated clinical files of elderly with more 60 years old of a Shelter (Population A), of the Assistance Program to Elderly of the Araraquara Prefecture (Population B) and of the Medicine Oral Service (Population C). We found 80% of the Population B with systemic disease and in medical treatment, which 88,2% was using medications. In the Populations A and B, respectively, 95% and 100%, inform have brush daily custom, but only 5% these had good oral hygienic. The Population B presented higher percentage of use of prosthesis (85%) than Population A (65%). The clinical conditions of the prosthesis were inadequate to A (50%) and B (20%) Populations. In the Population B 100% of the elderly were women with mucosal lesions and systemic disease. The mean CPOD were 30 teeth to the Population A and 29 teeth to the B. The institutionalized patients presented worse quality oral and systemic health for the majority of studied variables. They need special care and attention of the professional's health, including dentistry. (IC*-FAPESP 03-07195-0)

266. Tongue diseases: fissured, geographic and hairy tongue

PAGIN, O.*; CAPELOZZA, A. L. A.

This study presents some tongue diseases, such as fissured, geographic and hairy tongue. Fissured tongue is considered a congenital anomaly with a prevalence of 2% to 16% in the population. It is characterized by small symmetric grooves on the dorsal aspect, which may accumulate food debris and thus cause inflammation, even though it is a painless lesion. Treatment comprises only hygiene of the grooves. Geographic tongue is characterized by desquamation of the filiform papillae, which persists for an undetermined period and presents variable location, with a prevalence of 1% to 2% in the population. Possible triggering factors include emotional stress and immunological alterations; family history is important and is reported in up to 38.4% of the cases. The lesion is painless in most cases and there is no treatment. Association with fissured tongue is observed in up to 60% of cases. Hairy tongue is most frequently observed among adult men and is characterized by the increase and hyperkeratosis of the filiform papillae, which assume the appearance of hairs. Its etiology may be related to the utilization of antibiotics, corticoids, anti-hypertensives, oxidizing agents and after irradiation. Treatment comprises mechanical removal, brushing and topical application of keratolytics. Thus, dental professionals should know these lesions in order to treat them.

267. Lichen planus actinic: case report.

SPIRANDELI, D.*; ONOFRE, M. A.; DELORT, S.; SOUZA, G. A. B., SILVA, C. C. E VIEIRA, E. H.

The lichen planus actinic is a chronic dermatological disease that affect generally the oral mucosa. The main feature of this lesion is an exposure to sunlight. Case report: patient J.C.M., 36 years old, white, male, ex-smoker, farm work attended at Oral Medicine Service FOAr UNESP, with a complaint of "inflammation and itch in lip". In the clinical examination, was observed white striated plaques with bleeding ulcerations in all the lower lip, with discreet loss of elasticity. The diagnosis hypothesis were lichen planus erosive, lupus erythematosus and lichen planus actinic. The patient was submitted to incisional biopsy and histological diagnosis was lichen planus actinic. It was utilized triamcinolone 0,25% (unguent), without improvement of the case. It was chosen of the vermilionectomy. The histological diagnosis of the surgical piece was lichen planus actinic with moderate intraepithelial atypias of the one cuts. The patient is utilized sunscreen factor 30 and is being followed periodically by Service. The elaboration of the diagnosis and the correct treatment of the lesion permitted that all altered tissue was removed which contributed with prevention of carcinoma's lip.

268. Cryosurgery in fibrous lesions of oral mucosa

PEREIRA, T.*; NAVARRO, C.M.; SPOSTO, M.R.

Cryosurgery is a therapeutical method successfully used for many cutaneous condition. The application of cryosurgery has been indicated for several oral lesions such as: pyogenic granuloma, hemangioma, fibroma, papilloma, papillary hyperplasia, among others. We have noticed that this technique is a very useful option on the treatment of pediculated or superficially spread fibrous lesions. The authors show a series of three clinical cases (fibroma, papilloma and papillary hyperplasia) which were successfully treated with this technique. With the use of dermatological equipment and points with different diameters, a liquid nitrogen spray was directly applied to the lesion. Each lesion was exposed to two cycles of freezing and defrosting. Each cycle has a 20 or 30 - second freezing followed by a spray of water to defrost the surface. This technique is very easy and fast to perform. It also shows a good esthetic result, with neither bleeding nor pain, no surgical defects and no infection following the treatment. The technique requires more than one session, the performance of the histopathological analysis of the tissue is not possible and the tissue repairing is slow. Furthermore, the technique is restricted to small and superficial lesions. Cryosurgery is a useful alternative in cases where a biopsy can not be performed, like in patients medically compromised, young children or patients with no medical indication to surgical procedures.

269. Squamous cell carcinoma

PARDINI, P. V. G.*; GADDINI, H. C. R.; BRINHOLE, M.; DIB, L. L.; ARMONIA, L. P.; COSTA, C.

Squamous cell carcinoma, an evil that it attacks the buccal cavity commonly, tends the predilection for the masculine sex, leucoderm with superior age to 40 years, usually related to the Tobacco and Alcohol among other factors. The authors in this work comment a clinical case of the patient, leucoderm 51 years, the clinic attended of the Universit Paulista - UNIP, about a lesion in the with evolution of two months without cicatrization sign, to the exam intra-oral a lesion of aspect red, painful was contacted to the exam clinical was observed lymph node and cervical immobile sensibility. According to the information contained in the anamnesis the patient told to be smoking of the more than 20 years, but no alcoholism. After biopsy was verified diagnostic of Squamous Cell Carcinoma. After result the patient it was directed to the Hospital of Cancer.

270. Benign myoepithelioma affecting hard palate

ROSA, L. P.*; MONTEIRO, A. A.; DANTAS, S. P.; VARGAS, P.A.

Myoepithelioma is an uncommon salivary gland tumor that affects mainly the parotid and, less frequently, the submandibular gland and intraoral minor salivary glands. It is composed entirely of myoepithelial cells. A 26-year-old female was referred to the ACDC Stomatology Ambulatory due to an asymptomatic nodule located in the hard palate with unknown evolution. On clinical examination was found a right palatine nodule with fibroelastic consistency, smooth surface, and measuring 3cm in maximum dimension. The clinical hypotheses were pleomorphic adenoma or adenocarcinoma of minor intraoral salivary gland. We performed an incisional biopsy and the tissue was sent for histopathological analysis. Microscopically, the tumor was composed exclusively by plasmacytoid cells. The histopathological diagnosis was minor salivary gland benign myoepithelioma. The patient was referred to the department of Otorhinolaryngology of the University Hospital-UNICAMP to the complete tumor excision.

271. Paracoccidioidomycosis: case report

YAGINUMA, D. J.*; SOBRAL, L. M.; NAVARRO, C. M.; SPOSTO, M. R.

Paracoccidioidomycosis (Pmycosis) is an infectious disease very common in Latin America, particularly in Brazil. Clinical aspects are several, being the oral ones the most important for the dentistry. To report a case with difficult resolution. VAR, male, 42 years old, tiller, was seen at the Oral Medicine Service (FOAr/UNESP) reporting swelling in the cheek and difficulties to swallow and chew. During the health questionnaire he pointed to smoke paper cigarette and rope tobacco, besides alcoholic drink everyday during 30 years. We perceived a mental confusion and difficult of the patient understands, maybe due to a prolonged use of alcoholic drink. The clinical examination showed a vermilion of lip edematous, whitish pseudo membrane ulcers in the labial mucosa and both jugal mucosa. Incisional biopsy, collect of sample to fungal culture, exfoliative cytology and serology was accomplished. The results confirmed Pmycosis. The patient has been treated with Ketoconazole 200 mg twice a day for the last one and a half year. The patient does not follow the recommendations and a little improvement of the clinical aspects was observed. The follow up showed that the recurrence is evident because the oral lesions are still present and the serological results still positive. (IC* – FAPESP n° 03/07194-3)

273. Dental Treatment of patients with mental disability using general anesthesia

ROSALES, A. C. M. N.*; TAKAHAMA, A. J.; ELIAS, R. A.; CARVALHO, M. A.; JORGE, J.; ALMEIDA, O.; LOPES, M. A.

A significant number of patients with mental disability is unable to be treated in a traditional way or may present some difficulties leading to a dangerous situation. The use of general anesthesia as an auxiliary method for dental treatment in those patients with special needs is a polemic subject and in general is not well known by the dentists. Therefore, they have concerns to indicate this sort of method. The aim of this report is to present a literature review about the issue, showing the risks, benefits and technical descriptions of dental treatment under general anesthesia. Initially, the patients with mental disability must be evaluated in order to verify the possibility of treatment with local anesthesia. In those cases where local anesthesia is contraindicated, the dentist may decide for conscious sedation, which is very efficient when well indicated. When local anesthesia or conscious sedation cannot be used, the general anesthesia became the best option because of the possibility to conclude treatment in only one session. Most of the patients treated with general anesthesia are capable to maintain the treatment in an ambulatorial environment.

275. Cartilaginous choristoma – a case report.

JORGE, S. L. V.*; BICUDO, M. M.; REA M.; JORGE, R. S.; JORGE, J.

A 65-years-old male, was referred to the Estomatology clinic at ACDC – Campinas, complaining of a lesion in the hard palate for approximately two years. Clinical examination showed edentulous maxilla with poorly adapted upper denture and a round 0.5cm fibroelastic indolor nodule with smooth surface and normal aspect. The clinical hypothesis was fibrous hyperplasia, being the lesion surgically excised. Recovery period was uneventful. Final diagnosis was cartilaginous choristoma. The patient had no signal of recurrence after a three months follow-up, and was referred to have new dentures.

272. Squamas cell carcinoma espinocelular of lower lip story of clinical case

ROSA, L. A. L.*; MACEDO, V.; MACEDO, L.; KAWATA, L. T.; BIAZOLLA, E. R.; FURUSE, C. F.; FREITAS, S. E. N.; CONRADO NETO, S.; SOUBHIA, A. M. P.

The lip carcinomas represent about 40% amongst all the types of malignant neoplasias that acometem the mouth. Of these approximately 90% are located in the inferior lip, being the majority men, after 40 years and of clear skin, where the main etiologic factors are the solar tobacco and rays. CLINICAL CASE: Patient L. L. S., 64 years, was directed to the Center of Buccal Oncologia of Araçatuba, having carried an injury colored in left inferior lip of approximately 03mm, telling that the injury presented period of remission and exacerbation, having as disgnostic hypothesis of actinica queilite. The patient was guided to return to the service, however, only returned after one year. To the new clinico examination, the injury approximately presented vegetating, coloration colored with 25mm in its bigger extension, fibrosa consistency, moriforme surface and clear limits and without concrete linfonodos. The disgnostic hypothesis was of epiderms carcinoma, being carried through bi󰳩a incisional. The histopatogic cuts had confirmed the clinico diagnosis, being carried through excise of the injury for the technique in "W". The anatomy-pathological finding of the cirurgica part was of epiderms carcinoma with free edges of comprometimento. The patient meets under accompaniment and presents itself assintomatic.

274. Benign mucous membrane pemphigoid: case report

MARTINS, R. B.*; GIOVANI, E. M.; REAL, D. G.; PARDINI, P. V. G.; COSTA, C.

Disease blister-vesicle, auto-immune, chronicle, happening in the mucous membranes, happening in the buccal cavity and conjunctive ocular, besides the nasal mucous membrane, esophagus, laryngeal, vaginal and derm. Practice comes subepithelial, forming bubbles that arrive to painful ulcerations and persistences. Biopsy is the elective procedure for diagnostic. In the histology, there is discreet infiltrated inflammatory chronic in submucosa. The direct immunofluorescence, it is noticed continuous lineal band of reaction immune in the area of the membrane basal. Treatment is symptomatic with corticosteroid. The patient M.R.S. male, leukoderm, 41 years, it arrived to the Discipline of Integrated Clinic of UNIP for gingival treatment, that presented bleeding and aching for 2 years. The anamnesis, he said to have made treatments gingivals. He took Zovirax, Cetoconazol among other, unsuccessfully. Examination intraoral observed lesions erythematous, in the marginal gums and inserted (superior and inferior), bleeding to the manipulation and severe pain, similar to the descquamative gingivitis. Histopathology, it was observed bubble subepithelial and little inflammation. By direct and indirect immunofluorescence, it established diagnosis of Benign Mucous Pemphigoid. Medicated with Elixir of Dexametasona, mouthwashes 4 times per day for 20 days, presenting accentuated regression of the picture.

276. Epidemiological Study of the Oral Medicine of the University of Dentistry Araraquara

ROSSATO, C.*; MASSUCATO, E. M. S.; DERCELLI, J. R.; SOUZA, G. A. B.; PELLEGRINI, F. B.

In the oral diagnosis, the epideniological reserches take a very important place eventhough the studies done in this area are very scare. In this especific study, many data from the patients that hve passed on de Dental Service Department of the University of Dentistry in Araraquara- Unesp in the period from 1989 to 1993 piling up a total of 929 medical notes. From this files, all the clinical data of the patients were raised according to sex, age, racial group, use of drugs, presence of systemical diseases, clinical diagnosis, and hystopatological diagnosis. Subsequently these data were filed up in a program called Epilinfo 6.04 which provided the following results 6,07% was female and 39,3% was male from the total sample. According to the racial group, 83% was white aged from 30 and 60 years old. The results showed that the most frequent injurires were: candidiasis (179 cases), epithelial lesions potenciales malignant (85 cases), inflamatory fibrous hiperplasia (84 cases). From the total of analysed patients 50% aproximately showed some systemical disease and 30% used to take drugs regulary. We concluded that sort of studies are very important in order to establish the demand in these Public Dental Service, create preventive actions, meet the needs, and improve the assistance.

277. Oral health maintenance of the oncologic patient

SOUZA, G. A. B.*; MASSUCATO, E. M. S.; MARCANTONIO, A. C.; PINTO, L. A. M. S.; GONÇALVES, M.; PEREIRA, V. A. F.

In Brazil, 350 thousand cases of cancer has been diagnosis every year. The clinical course of this disease, the chemotherapy and the radiotherapy in the head and neck area can to cause several oral complications. Therefore the patients submitted to these treatments need orientation and differentiated attendance by an odontological team. The objective of this work is to present a model of submitted patients' attendance the treatment for the cancer, in the Faculty of Dentistry of Araraquara-UNESP and that were guided by oncologic centers. A professional team composed for dentists developed of the Faculty of Dentistry of Araraquara-UNESP and trainees, developed a extension project to elaborated prevention and treatment protocols of complications in the oral cavity of the oncologic treatment. A number of patients were observed, a narrowing in the relationship with the medical class that accompanies these patients and minimizes of the current complications of the treatment of the cancer, besides the improvement in the quality of the patients' life. The project lifted the needs of this special group of patients and it increased the information on the importance of the care with the oral health in these patient.

278. Esthetic treatment of multiple gingival recession.

GIRO, G.*; FREITAS-FILHO, D. L.; PINHEIRO, A. A.; MANTOVANI, R. V.; MARCANTONIO-JUNIOR, E.

Actually, with the increase of the aesthetic demands, the presence of gingival recession is a great aesthetic problems that disturb the patients. Beyond aesthetic problems, the gingival recession can cause some problems that even go from dentin hypersensitivity to cervical caries lesions due to the cleaning difficulty of the area. This report describes a case presentation of a surgical technique for root coverage of multiple adjacent recession defects using an acellular dermal matrix allograft (Alloderm®), as a substitute for a subepithelial connective tissue graft. The use of an acellular dermal matrix allograft eliminates the necessity of a surgical palatal donor site, minimizes the surgical procedure time and postsurgical complications. The results from this case, with 6 months of follow-up, were judge to be very successful, conform with the available evidence on the use of acellular dermal graft material in root coverage procedures.

279. Case report of bone graft and membrane made by polyurethane from Castor Oil for implant installation in cleft area.

RIBEIRO, I. W. J.*; REZENDE, M. L. R.; SANT'ANA, A. C. P.; PASSANEZI, E.; GREGHI, S. L. A.; SANADA, J. T.

Cleft patients usually present deficiency of bone tissue in the cleft area which can be regenerated by reconstructive procedures like bone grafts and guided tissue regeneration. The association of osteoconduction, osteogenic and osteo-induction are desirable requirements for biomaterials commonly used for those techniques. The reconstruction of alveolar ridge using resorbable membranes is a challenge. With the technologic development of biomaterials arise many kind of membranes, among which the polyurethane membrane from Castor Oil Plant is a possibility due to its lower price, big source of raw material in Brazil, bacteriostatic property and thermoplasticity. This clinical case reports a cleft lip and palate patient from the Hospital for Rehabilitation of Craniofacial Anomalies (HRAC-USP) with indication for implant installation at the cleft area. The cleft alveolus had already have suffered a graft from iliac crest but residual defect were still present. An autogeneous particulate bone graft associated to a membrane made by polyurethane from Castor Oil was accomplished and after the maturation of the graft the implant was successfully installed.

280. The inter-relationship between stress and periodontal disease

SBRANA, M. C.*; ALMEIDA, J. M.; BONFANTE, S.; GARCIA, V. G.; LUIZE, D. S.; MACARINI, V. C.; MURAKAWA, A. C.

Recent studies in periodontology have demonstrated that the periodontal disease's severity and progress can influenced by comportamental, ambiental and genetic factors. In the latest years, among these factors, stress has been the most important. Studies in psychoneuroimmunology support the hypothesis that the psychosocial factors have significant relation with different clinic aspects, such as infective diseases, diabetes, cancer and periodontal disease. The stress effects on the immune system occur by two main ligation ways "mind-body", the Sympathetic Nervous System (SNS) and the Hypothalamus-Hypophysis-Adrenal axis (HHA). The acute stress is related with the SNS activation and with higher levels in blood catecholamines, those promoters transitory changes in the number and activity of plasma leukocytes. The cronic stress is responsible for the HHA axis activation, releasing the glucocorticoid hormone (cortisol) that is associated with the decrease in immune functions, that can persist over days or months. In conclusion, the main purpose of this study is to review the mechanisms involved in stress and its oral manifestations.

281. Association between genetic polymorphism in TNF-β gene and chronic periodontal.

VASCONCELOS, D. F. P.*SILVA, M. A. D.; MARQUES M. R.; BRITO, R. B.; BARROS, S. P.

The periodontal destruction that leads to clinical findings such as increased periodontal probing depth involves a complex interaction between invading, proliferating pathogenic microorganisms and the immune system of the host patient. Tnf-β is a potent multifunctional immune modulator encoded by the major histocompatibility complex (MHC) that contributes to susceptibility to a variety of disorders of immune regulation, therefore our study aimed to analyze the association between periodontitis and polymorphisms of the TNF-β gene. One hundred five individuals were evaluated by measuring clinical attachment loss and divided in 45 health individuals (control group) and 60 subjects with chronic periodontal disease (PD). DNA samples were obtained from the individual's epithelial cells through scraping of the buccal mucosa. Polymorphism in the TNF-β gene was analyzed by PCR, followed by NcoI restriction endonuclease digestion (RFLP). Frequency of TNF-β gene showed significant differences between control group and group with PD ($p < 0.05$). The genotype homozygote was prevalent in the control group (42%), and the genotype heterozygote in the PD group (31%). The homozygote genotype seemed to increase susceptibility to $OR = 8.95$; $IC = 1.7-36.3$ and the heterozygote genotype seemed to increase susceptibility to $OR = 6.95$; $IC = 2.4-15.9$. The NcoI polymorphism of the TNF-β gene are the associated with clinical attachment loss due periodontal disease, in the studied population. These findings suggest the TNF-β gene genotype might be a risk indicator for the susceptibility to chronic periodontal disease.

282. Full mouth debridment with ultrasound associated to irrigation with 10% pvp-iodine solution.

ZANATTA, G.*; BITTENCOURT, S.; NOCITI JR, F. H.; SALLUM, E. A.; SALLUM, A. W.; CASATI, M. Z.

The aim of the present study was to evaluate the clinical effects of a single course of full mouth debridment with ultrasound associated to irrigation with 10% pvp-i (FM-DP) during a limited time of 45min. Forty-five patients were recruited in this study. Subjects were randomly assigned into three groups: The Q-SRP group received quadrant root planning at intervals of two weeks over four consecutive sessions; the FM-DW group received full mouth debridment with ultrasound associated to sterile water irrigation in 45 min; and the FM-DP group received full mouth debridment with ultrasound associated to 10% pvp-i irrigation in 45 min. At 3 months pocket probing depth reevaluation a reduction in three groups was observed ($p < 0.05$), with no statistically difference among these groups (FM-DW 2.58mm & #61617; 0.60, FM-DP 2.54mm & #61617; 0.50, Q-SRP 2.50mm & #61617; 0.52). The intra-group analysis showed a statistically clinical attachment level gain in all groups. During the inter-group analysis no statistically difference was observed (Q-SRP 1.86mm & #61617; 0.56, FM-DP 1.95mm & #61617; 0.70 and FM-DW 2.00mm & #61617; 0.92). BAPNA test didn't show statistically difference intra-group in plaque samples at 3 months ($p = 0.80$). These findings suggest that one-stage full-mouth debridment can obtain beneficial effects instead of short time treatment.

283. Coronally positioned flap with or without enamel matrix protein derivative for the treatment of gingival recessions – A comparative histometric study in dogs.

LIMA, L. L.*; RIBEIRO, E. D. P.; SALLUM, E. A.; NOCITI JR, F. H.; CASATI, M. Z.

The goal of this investigation was to evaluate, histometrically, the healing of gingival recessions treated by coronally positioned flaps associated with enamel matrix protein derivative (EMD-group) and to compare it to that obtained with coronally positioned flaps alone (CPF-group). Five mongrel dogs were used. Gingival recessions were surgically created on the buccal aspect of the upper cuspids. The defects (5x7 mm) were exposed to plaque accumulation for 3 months. After a preparation period, the contralateral defects were randomly assigned to each group. After 3 months of healing, the dogs were sacrificed and the blocks were processed. The histometric parameters evaluated included: gingival recession, length of epithelium, new connective tissue attachment and new bone. The gingival recession was -0.1 ± 0.2 mm for the EMD-group and -0.8 ± 1.3 mm for the CPF-group ($P=0.17$). The extension of the epithelium was 1.2 ± 1.0 mm for the EMD-group and 1.3 ± 0.7 mm for the CPF-group ($P=0.89$). The new connective tissue attachment was 4.8 ± 0.7 in the EMD-group and 4.0 ± 1.4 in the CPF-group ($p=0.22$). The new bone was 0.1 ± 1.8 mm and -0.5 ± 1.4 mm in the EMD-group and CPF-group, respectively ($P=0.50$). Histologically, the defect coverage observed was 98.2% for the EMD-group and 85.8% for the CPF-group.

285. Analysis of dependent and independent sucrose virulence factors in biofilm formation by *Streptococcus mutans* isolated from caries-free caries-active individuals.

STIPP R. N.*; NAPIMOGA M. H.; FURLETTI V.; KLEIN M. I.; MATTOS-GRANER R. O.; HOFLING J. F.;

Diverse factors, dependent and independent of sucrose, are related to the establishment of *Streptococcus mutans* (SM) in the oral cavity. This research evaluated the presence of 5 genes related with quorum-sensing and competence, and characteristics of virulence of SM, isolated from caries-free (Group1) and caries-active individuals (Group2, DMFT 12.0 ± 3.07). A total of 21 samples of SM isolated from individuals of Group1 and 37 from Group2, previously identified and genotyped, had been submitted the assays of: 1) Production of water-insoluble glucan (WIG) monitored by SDS-PAGE; 2) In vitro biofilm formation; and 3) PCR with specific primers, to detect interest genes. All the genotypes had presented the genes comB, comX and LuxS; the genes comCD had not been found in some samples and there was not correlation between absence of comCD and biofilm formation ($p>0.05$). The bands intensity of the GI formed by samples of the Group2 had been greater than the bands presented by samples of the Group1 ($p<0.001$), in addition the biofilm formation was greater by the samples of the Group2 ($p=0.03$). It was not possible to establish a positive correlation enters the synthesis of WIG with the in vitro biofilm formation by SM ($p>0.05$). The data shown that caries-active individuals harbored some genotypes of *S. mutans* with more expression of virulence factors, when compared with genotypes isolated from caries-free individuals.

287. Mucositis Induced for chemotherapy in hamsters: clinical and histopathological comparison of experimental models.

SACONO, N. T.*; FERRARI, J. C. L.; COSTA, C. A. S.; ABREU-LIMA, F. C. B.

The oral cavity is frequently affected by the antineoplastic drugs due to the tissue fast cellular proliferation, favoring the mucositis development. The aim of this study was to compare two experimental models praised to induce mucositis in hamsters, classify clinically the degree of the alterations in the cheek pouch of the animals and evaluate the tissue alterations by histopathological examination. For this experiment 30 animals were divided in two groups that received injection of the chemotherapeutic 5-fluorouracil in days 0 and 2. Group 1 had the mucosa scratched in days 1 and 3, using a stainless steel device. Group 2 had the mucosa scratched in days 3 and 4. Hamsters were weighed daily and 3 animals of each group were randomly selected for sacrifice in days 0, 4, 8, 12 and 15 for histopathological analysis. The cheek pouch was everted and photographed from day 4 until the end. Photographs were evaluated by two examiners and classified by an increasing scale in accordance with the severity degree (0 to 5). The Mann-Whitney test demonstrated statistical difference between the tested experimental models. Group 2 presented greater number and severity of injuries (64.3% = degrees 2 and 3), when compared with group 1 (70.9% = degrees 0 and 1). The experimental model with abrasion in days 3 and 4 is more appropriate for the induction of mucositis in hamsters.

284. Scanning electron microscopy and X ray microanalysis applied to study of bone substitutes.

CRUZ, G. A.*; DE LIMA, A. F. M.; TOLEDO, S.; SALLUM, E. A.

The matrix bovine bone, demineralized freeze-dried bone allograft and hydroxyapatite are bone substitute that that have been used in periodontal therapy as an alternative of reconstruction of osseous defect. The aim of this study was analyzed the morphologic and chemistry composition of the products are following: organic cortical and cancellous bovine bone with micro and macro particle size range from 0,25 to 1,0 mm and 1,0 to 2,0 mm respectively, inorganic bovine bone (Bio-Oss) with particle size range from 0,25 to 1,0 mm, natural mineral hydroxyapatite bovine bone with rough granulation particle size range from 750 to 1.000  and demineralized freeze-dried bone allograft (DFDBA) with particle size range from 250 to 500 . The samples were prepared and coated with gold in an ion coater, and then morphologic and measured of size were observed on vacuum condition by scanning electron microscopy. The chemistry composition was obtained by X-ray microanalysis using samples without covered. This study has demonstrated by SEM and EDS microanalyses that bone substitutes have irregular shape and larger particle size than mentioned by the manufacture. The analyses of compositions showed sodium, calcium and phosphor that are common to the bone composition.

286. Cronological age X biological age

NAKAMÁ, R. E. A.*; DA SILVA, M. M. D.; GUIRADO, C. G.; MAGNANI, M. B. A.

The vector's study of skull facial growth and development follow indicatives from ages or stages that look like constant in a normal organic development parameter that, in some times look like constant. The chronological age is not that relevant as the biological age in the growth and development estimate. The biological age will show the organism progress toward maturity and then will analyze: morphological age: represented by weight and height; statural age: registers the esquelkeletal maturity; bone age: is the best one that shows biological age; "circumpuberal" age: is an index of biological maturation and characterizes in feminine sex the growth strecht in high and the first period; dental age: must be associated to the chronological age, bone age and "circumpuberal" age to determine the best time for treatment; chronological age: helps in skull facial forecast development. Description of clinical cases: Patient JIC: masculine sex, white breed, 8 full years. The interview showed labor by cirjiry, historical without allergies, and chickenpox in first childhood. It showed his first dentist consultation, with the aim to verificate bucal conditions. At the clinical exam, it appeared cavity in 75 and low plaque index (10%). All decidual teeth were present, excepted for 31,41,21 and 11. At the X-ray exam (panoramic view), it appeared dental germs from permanent teeth; it was confirmed late eruption of 16,26,36 and 46. In the X-ray exam of carpal index showed bone age around 8 years and 6 months. Patient NMGDS: feminine sex, white breed, 8 full years. The interview showed labor by cirjiry, historical without chilhood disease, except for rinite allergic. Frequented odontopediatrics since she was a baby. The reason of the consultation was the premature teeth change. According to mom's account, the 16 and 26 erupted with 5 years old. The clinical exam showed no cavities and low plaque index (8%). Teeth present: 16,26,36,46,55,53,63,65,75,73,83 and 85. The X-ray exam (panoramic view) : 12,11,21,22,32,31,41 and 42 formed; at the exam of carpal index, the bone age was around 9 years and 2 months. Conclusion: to both clinical cases, it was established the importance of complementary exams in prediction and attendance of teeth age change.

288. Taste and salivary flow rate evaluation in oral and nasal breathing children.

BOER, C. C.; CORREA, A. F.; GAVIÃO, M. B. D.

Oral breathing may cause sensitive and diet changes. The aim of this research was to evaluate taste perception and salivary flow rate between oral breathing (group I n=20) and nasal breathing children (group II n=17), aged 9 to 12. It was randomly tasted 5ml of 4 solutions, in 3 concentrations (mol/L): NaCl (0.01;0.50;1.00), sucrose (0.01;0.50;1.00), citric acid (0.32;0.0158;0.032), caffeine (1.988x10⁻⁵;0.644x10⁻²;1.277x10⁻²), and water. Unstimulated and stimulated saliva (chewing paraffin) were collected. The children considered flavors as sweet, source, salty, bitter, and without flavor; the intensity as high, medium, low and without flavor. The t test, qui-square, and Fisher's exact test analyzed the data. For high concentration of citric acid more children from group II considered the correct intensity if compared to group I ($p=0.003$), whose classified it as low ($p<0.001$). A higher number of children from group II attributed correctly flavor for medium and high NaCl and high citric acid and caffeine concentrations, comparing to group I ($p<0.05$). There was no difference in unstimulated and stimulated flow rates, between group I (0.449,0.867ml/min) and II (0.436,0.894ml/min). It was concluded that source flavor intensity and perception of different flavors changed by oral breathing. Salivary flow rate and the prevalence of sweetly and salty foods in diet were no different between groups. FAPESP 03/03814-7

289. Diagnosis of the incipient occlusal caries: comparison between the diode laser and the visual examination

DE PAULA, A. B.*; CAMPOS, J. A. D. B.; HEBLING, J.

The aim of this study is to evaluate the in vitro and in situ diagnostic ability of the visual examination and the diode laser system (DIAGNOdent) on detection of the occlusal caries in permanent teeth. It was chosen 64 sites on the occlusal surface of the teeth and evaluated three times by 2 examiners with an interval of seven days among each evaluation. The validation was realized using the histological analysis of the dental sections, with a stereoscopic loupe. The results showed a reduction on the values of sensitivity in the in situ evaluation, when compared with the in vitro evaluation, for both methods by all examiners. The values of specificity were similar during in vitro evaluation, but when the visual examination was compared with DIAGNOdent, these values reduced in the in situ evaluation. In relation to sensitivity and specificity, both methods were similar. Inter-examiner, it was verified good concordance on the situ condition for both methods. It was seen a better intra-examiner concordance on the visual examination method. It was concluded that all methods were similar in relation to sensitivity and specificity on detection of the occlusal caries. The visual examination had better accuracy, suggesting that the other methods are investigated.

290. Buccal health in the childhood: evaluation of an education and prevention program for 2-6 year-old children

SILVA, C. C.*; ZUANON, A. C. C.; CAPOTE, T. S. O.;

The purpose of this study was to evaluate a 3-year educational and preventive dentistry assistance program offered to 40 children from 2 to 6 year-old of the Araraquara Children Center Coexistence-UNESP. Educational activities were offered weekly, that included drawings, theaters, music, games, lectures and supervised buccal hygiene, accompanied of a letter to the parents, communicating the taught issue, so that they could reinforce the learning in home. The program was evaluated after 12 and 30 months, by means of a questionnaire given to the parents, about their children's buccal health. After 1 year, the daily buccal hygiene increased, of 92,5% to 96,4%; the buccal hygiene request increased of 55% to 60% and so there was an increase of the frequency to the dentist, of 30% to 38,2%. Even so, according to the Qui-square McNemar Test, a statistically significant difference was only observed in the buccal health comments accomplished by children in home (of 45% for 61,8%). After 30 months, the buccal hygiene decreased of 92,5% to 88,4%; there was no alteration in the buccal hygiene request; the buccal health comments increased of 45% to 67,4% and the visits to the dentist increased of 30% to 51,2%. The authors concluded that the program presented positive results. The program maintained the interest for buccal hygiene by the children and promoted healthy habits for effective buccal health.

291. Marginal microleakage in cavities prepared with CVDentUS® and conventional diamonds burs

DINIZ, M. B.*; RODRIGUES, J. A.; CHINELATTI, M. A.; CORDEIRO, R. C. L.

Some factors contribute to restoration microleakage, being cavity preparation one of the most important. The aim of this study was to evaluate marginal microleakage in bovine tooth enamel margin cavities prepared by CVDentUS® tips and conventional diamonds burs. 30 teeth were divided in two groups. Conventional diamond bur associated with air turbine and CVDentUS® tip with ultrasound were used for cavities preparation which measurements were 1 mm depth. Cavities were restored with sealant Fluroshield® (Dentsply) according to manufacturer's instructions. After being isolated with Araldite® and cosmetic enamel, teeth were thermocycled in water 5°C ± 2°C and 55°C ± 2°C, totalizing 500 cycles. Teeth were immersed in a 0.5% basic fuchsin, sectioned and sandpapered manually until approximately 0,25 mm thickness. Microleakage evaluation was observed under an optical microscope connected to a color digital camera and a computer. The images obtained were digitalized and analyzed with a software AxioVision which measured the microleakage in millimeters. Statistical analysis under Mann-Whitney test showed no statistically significant differences in marginal microleakage ($p > 0,05$). It was observed a high amount of microleakage in both groups.

292. Dens in dente - clinical case account

FARHA, F. P.*; GUIRADO, C. G.

Dens in dente, it's a possible alteration caused by an extra invagination of the interior epithelium from the enamel to the interior of the tooth crown, before its mineralization. The invagination frequently communicates itself with the oral cavity, becoming an entrance to microorganisms and irritant agents directly to the dental pulp tissue or a place that is difficult for cleaning and susceptible to caries. This situation may extend beyond the compromise of the crown pulp, until the radicular pulp, leading to pulp necrosis, periapical lesion and periodontal abscesses. In this study we show a Dens in dente case clinically and radio graphically occurring in 12, 11, 21 and 22 teeth, in a seven-year-old patient, male sex, Caucasian, that uses routine neuroleptic medicine and shows a non defined neurological alteration, headed for treatment at FOP/Unicamp children clinic. In the anamnesis was noticed a trauma historic in the 61/51. It was made a preventing restore treatment for the Dens in dentes classified as Oehlers Type I, this seen that by a clinical exam, it was detected high activity/ high risk of caries. On the whole, the patient presents anterior open bite (habit of sucking pacifiers) what permits that the anomaly of form does not disturb the occlusion. However, the removal of habit and setting of orthodontic measures will be worked together to phononaudiology.

293. Longitudinal evaluating of stabilishment of first permanent molars occlusion

DOMINGOS, E. F.*; SIQUEIRA, V. C. V.

The authors evaluated longitudinal 30 young people leucoderms, both sexes, 16 girls, 14 boys, from 3 to 8 years old, to verify the stabilishment of first permanent molars occlusion to terminal face of second deciduous molars. The sample did clinical exams and four radiographs of both sides where two were done in deciduous dentition to evaluate the terminal relationship of second deciduous molars and two in mixt dentition to verify the occlusion of first permanent molars. The statical anlysis description of data showed that young people occlusion that demonstrated the terminal face of second deciduous molars in straight terminal plane, 16,66% developed to Class I, 18,33% to Class II and nothing to class III. From among, people that presented mesial degree, 38,33% developed to Class I, 11,66% to Class II and 6,66% to Class III. The authors concluded that the terminal face in straight plane and in distal degree, developed the occlusion of first permanent molars in equal form to Class I and Class II. The mesial occlusion showed good to stabilishment of occlusion's Key of first permanent molars in normality.

294. Desmistifying the open bite paradigm

FERNANDES, M. C. P. S.*

Into the dento-alveolar and esqueletics discrepancies, the open bite constitute a great problem to be solved by the orthodontist. Its etiology is multifuncional, its is, interact and operate in a certain potential growth inherent to every subject. The clinical features of this malocclusion are evidents, however, the treatment ways are diversified and, when badly employed, result in unavoidable iatrogenies. The aim of this study is to present several clinical cases of different ethiology, realionating and quantifying the open bite severity of young and adult young patients, defyning the right kind of mecanotherapy, finding the areas and using different methods of correction, for that one can realize an adequate planning and then a favorable prognostic.

295. Fixation methods in bilateral sagittal split osteotomy of the mandibular rami

SVERZUT, A. T.*; ASPRINO, L.; ALBERGARIA-BARBOSA, J. R.; MOREIRA, R. W. F.

The bilateral sagittal split osteotomy of the mandibular rami can be considered a landmark in the evolution of Oral and Maxillofacial Surgery. This osteotomy allows the correction of facial deformities with a series of advantages in relation to other techniques, mainly by involving intraoral access and allowing the use of internal fixation, therefore eliminating or at least abbreviating the period of intermaxillary fixation. Spiessel in 1976 introduced the use of interfragmentary screws for the fixation and stabilization of sagittal osteotomy and from this date on several fixation methods were described, such as titanium positional screws or lag-screws in several dispositions, miniplates and titanium screws, miniplates and resorbable screws and others. Our objective is to discuss and to analyze the methods of internal rigid fixation for bilateral sagittal split osteotomy of the mandibular rami regarding stability, reliability and applicability of the technique through a brief literature review on the subject.

297. Variations of the normal buccal aspect.

BARÃO, V. A. R.*; PADILHA, A. C. S.; GOMES, C. G.; SIMONATO, L. E.; CRIVELINI, M. M.; MIYAHARA, G. I.

The diagnostic process of a buccal illness has to be grounded in the sintamology; it is not enough just to identify a local anomaly. It has been affirmed that the diagnostic is the capacity of the professional to detect and observe only anatomic alterations. This kind of affirmation can hardly be considered conceptable, because on this way the diagnostic would simply be the detection of a clinical signal, as an ulcer, a blister or a blot. The simple detection of an alteration does not reveal the knowledge or capacity to identify the pathologic process that caused it. The knowledge of the normal structures of the mouth is fundamentally important, as well as the alterations of the standard normality, that is to distinguish from any pathologic manifestation. In this work, we shall present alterations of the buccal cavity that represents deviation of normality, although without any pathologic character, such as granules of Fordyce and some lingual formation, among others. These conditions, however, do not stop the professional to carry out a detailed and complete clinical exam, as it can occur in any structure of the mouth.

299. Evaluation of the human deciduous enamel acid resistance after diode laser irradiation

SANTAELLA, M. R. L. A.*; MATSON, E.*; FRENTZEN, M.**

The use of the fluoride is classic and efficient in the prevention of enamel caries, however, there is always a search for new alternative procedures for that end. Among those procedures, more recently, use of the laser, has been proposed based on the interesting results in several clinical situations in Dentistry. The deciduous teeth are more susceptible to caries and for this reason, the objective of this study was to test new alternatives for prevention of enamel caries in deciduous teeth. We used the pH cycling system for induction caries-like lesions in enamel of deciduous teeth surfaces. 80 teeth were used divided in 4 experimental groups: (GI) control - enamel without previous treatment, (GII) enamel treated with fluoride varnish (Duraphat), (GIII) enamel irradiated with diode laser followed by fluoride application, (GIV) enamel irradiated with diode laser. The laser used was a GaAlAs with the following parameters: 809 nm, 140 mJ, 50 Hz, 60 seg, 24,7 J/cm², in the mode contact. The pH cycling was accomplished after the preventive treatments for 10 days. The evaluation of the samples was made by test of Barcol hardness, polarization microscopy and scanning electron microscopy. There were no differences in the Barcol hardness among the several experimental groups. In the group treated with laser there was caries inhibition in 25% of the samples, while in the groups treated with both fluoride and laser combined with fluoride, the emergence of the lesions was totally forewarned. The results allowed us to conclude that the pH cycling is an effective method for obtaining enamel incipient caries and that new parameters of the diode laser should be tested in the sense of increasing the resistance of the enamel of deciduous teeth to the demineralization.

296. Total reconstruction of atrophic maxilla: when and why to indicate.

STABILE, G. A. V.*; ALLAIS DE MAURETTE, M.; ALBERGARIA-BARBOSA, J. R.; MAZZONETTO, R.

Patients with severe maxillary atrophy frequently present adapting problems with dental prosthesis. As a result, daily function in society can be significantly impaired. Treatment with osseointegrated titanium dental implants is now acknowledged as a safe, predictable method for rehabilitation of edentulous patients. However, the edentulous maxilla is often so severely resorbed that the volume of the remaining alveolar process is inadequate for conventional implant surgery. In this case, bony reconstruction is frequently necessary, since maxillary bone quality and quantity is insufficient for the placement of dental implants supporting partial or full dentures. One method of providing bony reconstruction, has been elevating the maxillary sinus floor and placing autogenous bone grafts and/or bone substitutes into the sinus floor. Another alternative is a bone graft using an on-lay technique for augmentation of the alveolar process in height and width. Our purpose is, through a brief literature review and presentation of clinical cases, to discuss the total reconstruction of atrophic maxillas using the anterior iliac crest as the donor site, indications and morbidity associated with this technique and forms of rehabilitation with osseointegrated implants.

298. Diagnosis and treatment of somatic and neuropathic pain - a clinical study report

NASCIMENTO, T. D.*; OLIVA, E. A.; BATISTA, A. U. D.; RABELO, J. G. R.; COELHO, T. M. K.; ALENCAR JUNIOR, F. G. P.

The evolution on the understanding of the orofacial pain has brought the interest to investigate the history of the patient, the progressive medical history, the physical examination, the identification of contributing factors and complementary exams, in order to obtain an accurate diagnosis. Most part of patients who look for the Orofacial Pain Center from the Dentistry University of Araraquara - UNESP present more than a major complaint, being common the presence of more than one disorder of the stomagnathic system. The complexity of cases makes the diagnosis and consequently the adequate treatment difficult to be done. In this work we will present a clinical study of the patient APMS, 33, who presented as major complaints: (1) pain in the dental units 26 and 27 for 3 months, with characteristic of pulsating, and burning pain, intensity 7 (according to visual scale from 0 to 10), constant duration, daily frequency and (2) pain in the left masseter region for 3 months, starting in the morning, becoming worse during the day, with characteristic of pulsating and burning pain, intensity varying from 8 to 10, constant duration and daily frequency. The diagnosis for the patient involved miofascial pain and peripheral neuropathic pain. The sequence of treatment, diagnosis, and the control of this case will be presented, in which the complete remission of signs and symptoms was accomplished.

300. Final irrigations solutions after endodontic biomechanically preparations with 2%cholexidine digluconate

NECHAR, R. B.*; DUARTE, M. A. H.; YAMASHITA, J. C.; KUKA, M. C.

The purpose of this study was available in scanning electron microscopic which final irrigations solutions offers cleaning dentinal walls, before used 2% chlohexidine digluconate in endodontic biomechanically preparations. Forty two teeth were prepared by Alternative Oregon technique associated with 2% chlohexidine digluconate solutions. In sequence, the specimens were subdivided in six groups with 7 teeth, in functions particular irrigations protocole: GI - EDTA + 0,9 % saline solutions; GII - EDTA + 1% sodium hypochlorite; G III - Citric acid + 0,9% saline solutions; G IV - Citric acid + 1% sodium hypochlorite; G V - Citric acid associated with tetracycline + 0,9% saline solutions; G VI - Citric acid associated with tetracycline + 1% sodium hypochlorite. Before the final cleaning, the specimens were longitudinal sectioned (palatal-buccal directions) and prepared to SEM evaluations. The results were submitted to Kruskal-Wallis tests and Miller and Mann Whitney tests. In apical sections no demonstrated difference statistical significance between groups. In cervical sections the best groups was G III with statistical difference of GII (p<0,05). The cervical sections were the best clean that others groups. In conclusion, the citric acid associated with 0,9% saline solution is the best sequence to final rinse after endodontic biomechanically preparations with chlohexidine digluconate.

301. Odontogenic keratocyst: emphasis to radiographic diagnosis and surgical diagnosis

FREITAS, P.*; YAEDÚ, R. Y. F.; MOREIRA, C. R.; SCHMITD, L. B.; FERREIRA JÚNIOR, O.; LARA, V. S.; DAMANTE, J. H.

A 14-year-old white female was referred to the clinic of Oral Medicine by her orthodontist who observed on panoramic examination a radiolucent lesion associated with tooth 48. The oval shaped area presented 2 cm in its largest diameter, well-defined limits, surrounded by a radiopaque border, indicating asymmetrical growth towards the ascending ramus of the mandible. The image of the pericoronal space was maintained in spite of the overlap of lesion. Discreet asymptomatic tumefaction was detected clinically. After provisional diagnosis of keratocyst, surgical treatment was instituted. During the enucleation it was noticed that the cyst was totally separated from the dental germ. Microscopic examination showed a cystic cavity covered by a thin epithelium, with corrugated surface, hyperchromatic palisaded basal cells and formation of satellite cysts into the adjacent connective tissue. The surgical diagnosis of cyst, without relation with dental germ, reinforced more the provisional diagnosis of odontogenic keratocyst. Aspects of pathogenesis and growth of keratocyst will be approached with the current clinical case.

302. Evaluation of feldspatic-ceramic and Empress 2 roughness after immersion in chemistry solutions.

PINTO, L.R.*; BALSALOBRE, R.A., PORTO, V.C.

During prostodontic procedure, prostheses can be contaminated by saliva and blood, so, the infection control is necessary to perform a suitable disinfection or sterilization. This study evaluated roughness changes in metal-ceramic and Empress 2 structures, after immersion in Glutaraldehyde 2% solution during 30 minutes (disinfection procedure) and 10 hours (sterilization procedure). There were fabricated 26 metal-ceramic structures and 26 Empress 2 structures, half of each group specimens was hand polishing and the other half was glazed (subgroups). Afterwards, they were submitted to sterilization and disinfection in chemistry solution. To positive control group was used 3 specimens of each group sterilized in autoclave, and to negative control, was used the initial measured of each specimen. Roughness was made after specimens fabricating and after immersion or sterilization in autoclave. After statistical analysis, the results verified that there were not statistically significant difference of roughness in both groups, after immersion in chemistry solution and sterilization in autoclave ($P>0,05$). It was concluded that the risk to create roughness surface after disinfection and sterilization procedures used in this study are clinical controlled and non-significant.

303. Perimolysis: etiology, diagnosis and treatment

HORBILON, B. Z.*; SIMAMOTO JÚNIOR, P. C.; QUAGLIATTO, P. S.; FERNANDES NETO, A. J.; SOARES, C. J.

The dental erosion is the process of desmineralization of the dental structures caused by the contact of these with acid substances interns or externais to the human body. When caused by chronic reflux, vomits or gastric dysfunctions, the erosive lesions are denominate perimolysis. They show mainly in the lingual surfaces of the anterior and posterior teeth and occlusal of posterior. This work has as objective to elucidate the dentist as the etiology and clinics characteristics of perimolysis and to aid him in the accomplishment of the diferencial diagnosis and treatment of this.

304. Drug therapy and gingival growth

SILVA FILHO, W. L. S.*; MARTINS, Â. G.; NOCITI JR., F. H.; CASATI, M. Z.; SALLUM, E. A.; SALLUM, A. W.

The Gingival Overgrowth is a pathologic condition of periodontium, normally associated to plaque (poor cleansing) and drugs therapy, what results in estetic and phonation problems. The gingival overgrowth is often associated to the calcium channel blockers administration, especially the Diidropiridine. Some scientist appoint this drug association to the metabolic alteration of the collagen matrix synthesis and gingival fibroblasts proliferation. Our purpose is to present a case report of a patient who came to the Piracicaba Dental School at the Periodontic Department, complaining about an excessive gingival growth. The patient related the use of anti-hipertensive drug, Amlodipine (Besilate), belong to the Calcium Channel blockers group, for 10 years. In addition, he present a bioemocional profile characterized by stress, depression (panic syndrome) and sleepness. Initially, the patient was submitted to the basic periodontal treatment that was associated to the cause. In a second moment, it was performed a gengivectomy and biopsy, that we could get the diagnostic, after the anatomo phatologic analysis, of Gingival Overgrowth. The clinical results show that there is a direct association between the calcium channel blockers in the gingival growth.

305. Use of bone graft in implantology

STANG, B.; ALBERGARIA-BARBOSA, J. R.; MORAES, M.; PASSERI, L. A.

Since the introduction of osseointegrated implants for the treatment of totally and partially edentulous patients, the rehabilitation with implants has been successful and predictable in cases where adequate quality and quantity of bone are available in the receptor site. In the presence of alveolar resorption or other bone defects, reconstruction with bone grafts is indicated. Bone grafts for maxillary and mandibular reconstruction can be used as onlay, inlay or interpositional grafts. The grafting material should promote bone neoformation, allowing stabilization and osseointegration of the implant. The posterior maxilla frequently suffers maxillary sinus pneumatization and represents an indication for inlay bone grafts to promote augmentation of the sinus with improvement in the alveolar ridge height. Our aim is to briefly review the main indications of maxillary reconstruction in the planning of prosthetic rehabilitation with osseointegrated implants and to present a series of clinical cases.

306. Study of the application of antiseptics in the oral chemical carcinogenesis

CARDOSO, C. L.*; PRADO, R. F.; TAVEIRA; L. A. A.

Studies have related the action of alcohol on the oral mucosa as a promoter of carcinogenesis, and most oral antiseptics contain alcohol. This study aimed at conducting a macroscopic and microscopic analysis of the tissue response of tongue mucosa of hamsters to daily topical applications of antiseptics (Anapyon, Listerine, Oral B) during 13 and 20 weeks, following the methodology for investigation of carcinogenesis developed by the Discipline of Pathology of Bauru Dental School, University of São Paulo. After sacrifice of the animals, their tongues were removed and fixated in 10% formalin. Macroscopic examination did not reveal significant alterations, and the specimens were processed by routine histotechnical procedures for HE staining. Three serial sections of each tongue third were evaluated, and characteristics related to epithelial hyperkeratinization, atrophy, hyperplasia and dysplasia were organized in tables. Despite the observation of moderate dysplasia in one case for the Anapyon group at 20 weeks, the further results were very similar to the control group (saline solution), eliminating the need of comparative statistical tests. By means of such methodology for testing of carcinogenesis-initiating action, it was concluded that oral antiseptics are unable to trigger the development of neoplasms. We thank the financial support from CNPq.

307. Comparative study of the alveolar wound healing after tooth extraction using the platelet-rich plasma

MELO, W. M.*; MARIANO, R. C.

The aim of this study was evaluating clinic and radiographically the behavior of Platelet-Rich Plasma (PRP) in alveolus after traumatic dental extractions that could create bone defects in repairing. It was done 34 surgical procedure of third molars inferiors bilaterally impacted, being that in the alveolus of one of the sides was introduced the graft of PRP (Group 2). The alveolus has controlled (Group 1) was filled by blood clot. The patients had been evaluated to 7 days, 1, 2, 3 and 6 months to register the clinical and radiographics data. The gingival depth of ridge around of the second molar inferiors was evaluated with sounding lead. The bone density was quantified using the HLImage 97 program. The treated alveolus with PRP presented larger averages ($p < 0,05$) of bony density in the periods of 7 days, 1 and 3 months showing good results of acceleration of bony formation (Group 1= 68,128%; Group 2= 75,018%) same considering that the volunteers of the research were young individuals and healthy. The third of the alveolus that presented faster bony formation was the apical, mainly in the G2. The depth of gingival among the groups it showed differences in the periods 7 days and 1 month, with return to the ideal depth more quickly when the graft of PRP was used. The graft of Platelet-Rich Plasma allowed bony formation and faster epielial after the extraction of impacted third molars inferiors.

309. Acceptability and understanding evaluation of educational program about buccal health in lacking children

QUELUZ, D. P.; SILVA, C. R. *

Same living in a time, where the progress in the dental areas has been growing, it is constant we come across ourselves the precarious conditions of buccal health existent in the country, because our population still possesses little access to the attendance dental service, and the necessary information for the buccal health. The objective of this study was to evaluate the acceptability and understanding of an educational program idealized for buccal health' promotion in 120 children (55 female and 65 male) in the age group from 8 to 15 years of Atendimento Partner's Center - Educational, located in outlying neighborhoods of Piracicaba-SP. The data were collected through questionnaire with subjects on knowledge in buccal health in the beginning with closed questions and in the end of the program with open questions, respecting at least 30 days of interval. For those 30 days pedagogic works were developed about buccal health by the monitors and teachers that they were guided for that, using audiovisual resources. It could be concluded that changed the percentile of success significantly in the subsequent subjects to the presentation and that the method was shown efficient for the children's motivation.

311. Teeth-supported overdenture without palatum covering-report of a clinical case

BITU, C. C.*; CRUZ, M. V. DE J.; SIERAKOWSKI, P. R.; SILVA, F. A. E.; SILVA, W. A. B. E.; RAMOS, G. DE G.; MAIA, I. P. G. R.

The maintenance of residual roots was condemned by some professionals due to the possibility of infection, however, with the evolution of concepts and new interpretations, the preservation of the roots became to be the only way to keep the proprioception, increase of retention and stability as well as better mastigatory efficiency and then there were the overdentures. This report illustrates the case of a patient who had a unsatisfactory bridgework supported by five residual roots and refused to wear a total denture, so a teeth-supported overdenture was planned for her without resin palatum covering. This kind of prosthesis provides all the advantages above and also better thermal sensibility and satisfaction for the patient who feels discomfort with the contact of the resin with the palatum, wich is replaced by the major connector.

308. Understanding level and knowledge about buccal health in students/patient handicapped at APAE-Piracicaba

QUELUZ, D. P.; PANTAROTO, T. E. *

The Parents and Friends Association of the Exceptional - Piracicaba are an entity that assists students/patient handicapped, the parents and relatives of the same ones, as well as society in a general way. The purpose of this study was to accomplish an analysis of the understanding level and knowledge about buccal health in students/patient handicapped at APAE - Piracicaba. The data was collected from questionnaires and lectures of 27 students/patient handicapped (13 female and 14 male), in the age group from 15 to 38 years, being looked for to prevent the decay and periodont disease, motivating the students/patient handicapped, relating to habits of buccal hygiene, implementing the daily dental brushing and others. It was used educational-preventive activities to the belonging students/patient handicapped the workshops of courses vocational (NAAP). For the lifted up data, he/she becomes evident the influence of the educational process in the improvement of the conditions of buccal health of the students/patient handicapped, as well as the importance of the appraiser's of the educational.

310. Diastema correction due to color and the structure of the tooth with aesthetic objective - Clinical Case

QUELUZ, D. P.; YAMAMOTO, A.M.*

One of the problems found in the routine professional are color alterations, forms and position of the previous teeth that represent the diastemas. Among the principal techniques of closing of the diastema in previous can mention: orthodontic movement, cosmetic correction with composite resins and indirect facets. This work reports the patient's clinical case G.A., male sex, 19 years that sought the dental clinical with significant dissatisfaction with the presence of the diastema among 11/21 and 21/22, both of approximately 2 and 1,5mm respectively. Firstly, the bleaching was accomplished with carbamide peroxide 10%. After 20 days it was followed for the clinical steps: absolute isolation, application of the phosphoric acid 37%, washing of the acid with water spray, application of the sticker primer Bond 2.1, light polymerization and insert of the composed resin Esthetic - X through the technique increment, with the light polymerization of each one of the increments. The finish was accomplished with scalpel sheets and polishing of the vestibular surface with disks SOF-LEX and in the palatine area with multi-laminated drills. We concluded that the composite resin is the most indicate for the closing of the previous diastema due to relationship cost-benefit, the reversibility of the procedure, as well as the conservation of the dental structure and the smallest number of clinical sessions.

312. Effect of manipulative techniques on electric activity of the masticatory muscles

BORINI, C. B.*; RIES, L.G. K*; RIBEIRO, E. C.*; DUARTE, C.*; BÉRZIN, F.*

The aim of this study was to analyze the effect of the manipulative techniques of distraction to articulate and lengthening of the masticatory muscles on the amplitude of movements and electric activity of these, in volunteers with temporomandibular disorder (DTM). Eleven female volunteers were used, with age between 20 and 41 years. The subjects were evaluated before and after application of the manipulative techniques, by mensuration of the amplitude of opening, right and left lateral and protrusive movements of the jaw. After that, the subjects were submitted to the electromyographic examination from the masseter and anterior portion of temporal muscles, bilaterally. The subjects were submitted to the follow procedures: joint decoaptation synchronized with the respiratory cycle during 90 seconds for each side and, lengthening of the elevator muscles of the jaw through the oral opening against resistance. This examination was made before and after the procedures. The results were analyzed by statistical test t of Student. The results showed that, the reduction of the electric activity, the techniques of joint distraction and lengthening of the elevator muscles of the jaw had provided the relax of the evaluated muscles. However, these techniques had promoted no significant difference in the measures of joint's amplitude.

313. Shear bond strength of acrylic resin teeth to denture base polymerized by microwaves energy.

JOIA, F. A.; RIZZATI-BARBOSA, C. M.; SILVA-CONCILIO, L. R.; MACHADO, C.; RIBEIRO, M. C.; MELOTO, C. M.; SILVA, L. H. G.

The aim of this study was to evaluate shear bond strength between denture teeth and heat-polymerized acrylic resin, polymerized by microwaves energy when different surface treatments were applied in artificial teeth. Twenty left maxillary lateral incisor denture teeth, of each one of the evaluated commercial brands were used: VIPI DENT (V), BIOTONE (B), TRILUX (T) and BIOLUX (BL). The acrylic resin used at the present study was VIPI WAVE. The samples were enclosed in PVC flasks and received the following surface treatments: untreated (C), monomer application (M), grooved with aluminum oxide of 100µm (G) and retention with 2mm of depth (R), obtaining 16 groups with 5 samples each, and polymerized in oven with 900W of power, according to manufacturer's instructions (20 minutes at 20% of potency, more 5 minutes at 60% of potency). After deflasked it was carried out finishing procedures with tungsten drills and then submitted to the shear test in INSTRON 4411 machine. The mean values (Kgf) obtained were: GVC-21.85, GVM-24.45, GVJ-22.7, GVR-19.62, GBC-35.64, GBM-34.86, GBJ-27.9, GBR-26.75, GTC-29.78, GTM-22.54, GTJ-21.01, GTR-26.3, GBLC-32.26, GBLM-30.15, GBLJ-25.59 e GBLR-18.67. Data were submitted to ANOVA test (5%) that demonstrated no statistical significant difference among the groups.

315. Generalized Aggressive Periodontitis. A case report with 4 years follow-up.

MACEDO, V.*; DELIBERADOR, T. M.; ROSA, L. A. L.; FURLANETO, F. A. C.; MESSORA, M. R.; NAGATA, M. J. H.; BOSCO, A. F.

Periodontitis is a multifactorial disease with genetic and environmental interaction. According to the American Academy of Periodontology (1999), it is classified as: chronic, aggressive, a manifestation of systemic diseases, necrotizing ulcerative or associated with endodontic lesions. Aggressive Periodontitis is a specific type of periodontitis with clearly identifiable clinical and laboratory findings. It is classified as either localized or generalized. The key features associated with Aggressive Periodontitis are: rapid clinical attachment loss and bone destruction, familial aggregation and, except for the presence of periodontitis, patients that are otherwise clinically healthy. It usually affects persons under 30 years of age, but patients may be older. Treatment of Aggressive Periodontitis includes local procedures, such as scaling and root planing, and systemic measures, such as antibiotic therapy, followed by supportive periodontal therapy. The purpose of this presentation is to report on a clinical case involving a 34 year-old patient who presented to the Periodontics Clinic of the Dental School of Araçatuba with generalized Aggressive Periodontitis. She received comprehensive periodontal treatment and has been followed for 4 years, demonstrating the success of the combined periodontal therapy.

317. Comparative study of the alveolar wound healing after tooth extraction using the platelet-rich plasma.

MELO, W. M.* ; MARIANO, R. C.

The aim of this study was evaluating clinic and radiographically the behavior of Platelet-Rich Plasma (PRP) in alveolus after traumatic dental extractions that could create bone defects in repairing. It was done 34 surgical procedure of third molars inferiors bilaterally impacted, being that in the alveolus of one of the sides was introduced the graft of PRP (Group 2). The alveolus was controlled (Group 1) was filled by blood clot. The patients had been evaluated to 7 days, 1, 2, 3 and 6 months to register the clinical and radiographic data. The gengival depth of ridge around of the second molar inferiors was evaluated with sounding lead. The bone density was quantified using the HLImage 97 program. The treated alveolus with PRP presented larger averages ($p < 0,05$) of bony density in the periods of 7 days, 1 and 3 months showing good results of acceleration of bony formation (Group 1 = 68,128%; Group 2 = 75,018%) same considering that the volunteers of the research were young individuals and healthy. The third of the alveolus that presented faster bony formation was the apical, mainly in the G2. The depth of gengival among the groups it showed differences in the periods 7 days and 1 month, with return to the ideal depth more quickly when the graft of PRP was used. The graft of Platelet-Rich Plasma allowed bony formation and faster epithelial after the extraction of impacted third molars inferiors.

314. Histological study of association of lyophilized collagen and demineralized bovine bone matrix in the socket repair process

ZAGO, P. M. W.*; MONIZ, N. J., ALBERGARIA-BARBOSA, J. R.

The authors conducted a histological study of the socket repair process in rats whose dental sockets were filed with a mixture of lyophilized collagen and demineralized bovine bone matrix. Forty eight adult male (*Rattus Novergicus albinus*, Wistar) rats, approximately 90 days old and weighing about 170 grams were randomly divided into two groups - control and experimental having 24 animals each. The right maxillary incisors were extracted after the rats, in both groups, were anesthetized using sulfuric ether vapor. Immediately after extraction, the sockets of the rats in the experimental group were filed with a mixture of lyophilized collagen and demineralized bovine bone matrix. For each experimental period, four animals from each group were sacrificed trough over-inhalation of sulfuric ether -at 3,6,9,15,21 and 30 postoperative days. Conclusions:1) the mixture of lyophilized collagen and demineralized bovine bone matrix produced a mild inflammatory reaction during the initial phases of the socket repair process, however, this reaction was different from that caused by a foreign body.2) the mixture of lyophilized collagen and demineralized bovine bone matrix was rapidly absorbed by the body.3) the mixture of lyophilized collagen and demineralized bovine bone matrix delayed the repair process during its initial stages but the total repair time was the same as in the control group.

316. Study of the application of antiseptics in the oral chemical carcinogenesis

CARDOSO, C. L.*; PRADO, R. F.; TAVEIRA, L. A. A.

Studies have related the action of alcohol on the oral mucosa as a promoter of carcinogenesis, and most oral antiseptics contain alcohol. This study aimed at conducting a macroscopic and microscopic analysis of the tissue response of tongue mucosa of hamsters to daily topical applications of antiseptics (Anapyon, Listerine, Oral B) during 13 and 20 weeks, following the methodology for investigation of carcinogenesis developed by the Discipline of Pathology of Bauru Dental School, University of São Paulo. After sacrifice of the animals, their tongues were removed and fixated in 10% formalin. Macroscopic examination did not reveal significant alterations, and the specimens were processed by routine histotechnical procedures for HE staining. Three serial sections of each tongue third were evaluated, and characteristics related to epithelial hyperkeratinization, atrophy, hyperplasia and dysplasia were organized in tables. Despite the observation of moderate dysplasia in one case for the Anapyon group at 20 weeks, the further results were very similar to the control group (saline solution), eliminating the need of comparative statistical tests. By means of such methodology for testing of carcinogenesis-initiating action, it was concluded that oral antiseptics are unable to trigger the development of neoplasms. We thank the financial support from CNPq.

INDEX

A

ABDALA, A.M. (247)
 ABREU-E-LIMA, F.C.B. (287)
 ABUABARA, A. (221)
 ABUD, M.C. (123)
 ADABO, G.L. (80)
 AGOSTINI, M. (122)
 ALBERGARIA-BARBOSA, J.R. (2), (41), (44), (179), (218), (222), (295), (296), (305), (314)
 ALENCAR JUNIOR, F.G.P. (51), (298)
 ALENCAR, S.M. (15)
 ALEXANDRE, R.S. (138)
 ALLAIS DE MAURETTE, M. (110), (211), (214), (217), (245), (246), (296)
 ALMEIDA, A.V. (256)
 ALMEIDA, G.A. (134)
 ALMEIDA, J.M. (280)
 ALMEIDA, O. (273)
 ALMEIDA, O.P. (67), (70), (71), (116), (120), (121), (122)
 ALMEIDA, R.R. (37), (234), (235), (237)
 ALMEIDA, S.M. (98), (102), (103), (104), (106), (117)
 ALVES, F.A. (120)
 ALVES, L.A.C. (85)
 ALVIM, H.H. (144)
 AMARAL, R.C. (227)
 AMARAL, R.M.P. (248)
 AMBROSANO, G.M.B. (23), (26), (36), (83), (106), (111), (138), (140), (142), (198), (229), (259)
 AMORIM, A.R. (95)
 AMORIM, C.F. (95), (97)
 AMORIM, L.J. (97)
 AMORIM, M.M. (81)
 ANDRADE, E.D. (164), (165)
 ANGELIERI, F. (234), (235), (237)
 ANSELMO, S.M. (48), (200), (201)
 ANTONIALI, E.O. (240)
 ANTUNES, R.M. (223)
 ARAÚJO FILHO, G.C. (73)
 ARAÚJO, C.A. (52)
 ARAÚJO, D.Z.R. (119)
 ARAUJO, F.P.C. (192)
 ARAÚJO, M.A. (242)
 ARCE, L.D.C. (121)
 ARMONIA, L.P. (269)
 ARRIGONI, M. (33), (34)
 ARTHUR, R.A. (18)
 ASPRINO, L. (9), (295)
 ASSAF, A.V. (229)
 ASSIS, A.F. (7)
 ATTA, M.T. (133)
 AYUB, E.A. (54)
 AZEVEDO, C.M. (100), (261)
 AZEVEDO, D.D. (92)

B

BABONI, C.R. (199)
 BALBIN, A.V. (95), (97)
 BALSALOBRE, R.A. (302)

BANG, S. (72)
 BARÃO, V.A.R. (16), (17), (297)
 BARBEIRO, R.H. (7)
 BARBOSA, D.Z. (42)
 BARBOSA, G.A.S. (73), (190)
 BARRETO, G.M. (242)
 BARROS, A.B. (214)
 BARROS, S.P. (86), (87), (281)
 BARUD, H.S. (225)
 BASTOS, E.G. (44)
 BASTOS, P.L. (199)
 BATISTA, A.U.D. (50), (51), (298)
 BATISTA, J.D. (65), (66), (212)
 BELLUCI, M.M. (170)
 BELTRÃO, R.T.S. (37), (238)
 BENATTI, B.B. (109)
 BERBER, V.B. (153), (156), (157)
 BERENGUEL, I.A. (220)
 BERNARDES, S.R. (52), (73)
 BÉRZIN, F. (81), (82), (312)
 BIANCHI, F.J. (46), (89)
 BIANCHI, L. (83)
 BIAZOLLA, E.R. (272)
 BICUDO, M.M. (114), (275)
 BIFFI, J.C.G. (131)
 BITTENCOURT, S. (56), (62), (109), (282)
 BITU, C. C. (311)
 BOAVENTURA, J.M.C. (137)
 BOER, C.C. (288)
 BOER, M.C. (147)
 BONFANTE, G. (54), (181), (197)
 BONFANTE, S. (280)
 BORGES, A.F.S. (74)
 BORGES, C.P. (94)
 BORINI, C.B. (312)
 BORTOLOCCI, A.G.J. (169), (264)
 BOSCATO, N. (173)
 BOSCO, A.F. (315)
 BÓSCOLO, F.N. (102), (106), (107)
 BOTEGA, D.M. (255)
 BOWEN, W.H. (15)
 BRANCO, F.P. (14), (166), (167)
 BRANDAO, A.G. (234), (235), (237)
 BRASILEIRO, A.A. (33), (34)
 BRASILEIRO, B.F. (6), (179)
 BRINHOLE, M. (269)
 BRIOSCHI, V. (32)
 BRISO, A.L.F. (25)
 BRITO, R.B. (281)
 BRUNETTO, P.C. (172)
 BUENO, V.C.P.S. (27), (139)
 BUSCATTI, M.Y. (99)
 BUZZÁ, E.P. (169), (264)

C

CABRAL, C.W.L.F. (53), (172), (194), (200), (201), (204)
 CAETANO, I.M. (181)
 CALABRIA, M.P. (129)
 CALDAS, M.P. (104)
 CAMPAGNOLI, E.B. (67), (68)
 CAMPOS, E.B.V. (35), (185)

CAMPOS, J.A.D.B. (162), (289)
 CAMPOS, R.E. (20)
 CANDIDO, M.S.M. (135), (136), (143)
 CANIATTO, C.W. (244), (252)
 CAPELOZZA, A.L.A. (101), (266)
 CAPOTE, T.S.O. (290)
 CARDOSO, C.L. (306), (316)
 CARDOSO, P.E.C. (76)
 CARIA, P.H.F. (83), (84)
 CARIELLO, M.P. (213)
 CARLO, H.L. (47), (127), (136), (144)
 CARLOS, R. (116)
 CARMO, L.A. (205)
 CARRASCOZA, K.C. (31), (32), (33), (34), (35), (183), (184), (185), (186), (187), (188), (189)
 CARRILHO, M.R.O. (78)
 CARVALHAL, C.I. (74)
 CARVALHO, M.A. (273)
 CARVALHO, R.M. (129)
 CARVALHO, V.A.P. (85)
 CARVALHO, Y.R. (117)
 CASARIN, C.A.S. (83)
 CASATI, M.Z. (56), (57), (59), (62), (63), (282), (283), (304)
 CASATTI, C. (3)
 CASSELLI, H. (172), (180), (205)
 CASSIS, M.A. (234), (235), (237)
 CASTALDONI, A. (92)
 CASTELLANOS, E.G. (245), (246)
 CASTRO, C.F. (225)
 CASTRO, C.G. (47), (223)
 CASTRO, L.H.G. (168)
 CASTRO, M.L. (15), (92)
 CAVALCANTI, A.N. (22), (130), (138), (140)
 CECANHO, R. (13)
 CERAVOLO, M.C. (230)
 CHAVES, A.J.P. (1)
 CHAVES, F.C.A. (1)
 CHIAROTTI, A.P.S. (184), (189)
 CHINELATTI, M.A. (291)
 CIRELLI, C.C. (247)
 CLÁUDIO, C.C. (3)
 COELHO, E.B. (225)
 COELHO, L.G.C. (225)
 COELHO, T.M.K. (50), (51), (298)
 COLARES, J.C.M.R.N. (129)
 COLETTA, R.D. (67)
 COLOMBINI, B.L. (55)
 CONRADO NETO, S. (272)
 CONSANI, R.L.X. (77), (254), (257), (258), (259), (260)
 CONSANI, S. (77)
 CONTRERAS, E.F.R. (126), (196)
 CORDEIRO, R.C.L. (291)
 CORREA, A.F. (288)
 CORRÊA, J.D.H. (207)
 CORRER-SOBRINHO, L. (145)
 CÔRTEZ, G. (179)
 CORTEZ, A.L.V. (6), (213), (221)
 CORTEZ, D.G.N. (10), (147)
 COSENTINO, G.V. (117)
 COSTA, C. (99), (177), (209), (269), (274)

COSTA, C.A.S. (287)
COSTA, L.C. (128)
COSTA, L.R.S. (36)
COSTA, M.D.M.A. (65), (66), (212)
COSTA, M.E.G. (1)
COUTINHO, M.R. (50)
CRIVELINI, M.M. (297)
CRUZ, A.D. (105)
CRUZ, G.A. (284)
CRUZ, M.V.J. (180), (192), (194), (200),
(202), (204), (311)
CUNHA, H.A. (206)
CUNHA, M.O. (180)
CUNHA, V.P.P. (256)
CURY, A.H. (76)
CURY, J.A. (13), (15), (18)

D

DA SILVA, M.M.D. (286)
DAHMEN, L. (39), (40)
DAMACENO, A.R. (199)
DAMANTE, J.H. (264), (301)
DAMETTO, F.R. (149)
DAMIS, A. (204), (205)
DANTAS, J.F. (7)
DANTAS, S.P. (108), (270)
DAROZ, L.G.D. (196)
DARUGE JR, E. (36), (111), (113)
DARUGE, E. (36), (113)
DE GOES, M.F. (78)
DE LA CRUZ, B.V.M. (36), (111), (113)
DELIBERADOR, T.M. (315)
DE LIMA, A.F.M. (284)
DE MORAES, M. (45)
DE OLIVEIRA, R.G. (45)
DE PAULA, A.B. (289)
DECHICHI, P. (91), (151)
DEL BEL CURY, A.A. (18), (171), (173),
(174)
DELBONI, M.G. (148)
DELIBERADOR, T.M. (210)
DELLA BONA, A. (173)
DELORT, S. (64), (267)
DERCELI, J.R. (276)
DEVIDES, J.D. (264)
DEVIDES, N.J. (169)
DEVITO, K.L. (98)
DEZEM, F. (201)
DI FRANCISCANTONIO, M. (23)
DI HIPÓLITO JR., O. (122)
DIAS, C.T.S. (27)
DIB, L.L. (269)
DINIZ, D.G. (50)
DINIZ, M.B. (291)
DOMENICONI, M. (224)
DOMINGOS, E.F. (293)
DOVIGO, L.N. (135)
DOVIGO, L.N. (162)
DUARTE, C. (312)
DUARTE, D.G. (215)
DUARTE, M.A.H. (146), (300)
DUARTE, S. (15)
DUQUE, D.C. (182)
DURÃO, V.C.A. (25)

DURIGHETTO JUNIOR, A.F. (65), (66)
DURIGHETTO, I.L. (65), (66)
DUTRA, S.M.V. (117)

E

ELIAS, J.C. (208)
ELIAS, R.A. (118), (119), (273)
ERENO, C. (146)
ERVOLINO, E. (3)
ESBERARD, R.R. (143)
ESPÍRITO SANTO, A.R. (90)

F

FARAC, R.V. (226)
FARHA, F.P. (292)
FELIPE, W.F. (37)
FELIPINI, R.C. (69)
FELIZARDO, K.R. (64), (170), (263)
FERNANDES NETO, A.J. (52), (73),
(134), (141), (145), (190), (195), (303)
FERNANDES, M.C.P.S. (294)
FERNANDES, T.M.F. (128)
FERRARI, F.L. (226)
FERRARI, J.C.L. (287)
FERRARI, M. (76)
FERRAZ, C.C.R. (10), (11), (12), (148),
(149), (150), (152), (153), (154), (155),
(157), (158), (159), (160)
FERREIRA JÚNIOR, O. (301)
FERREIRA, D. (233)
FERREIRA, D.F. (258)
FERREIRA, F. (147)
FERREIRA, R.I. (98), (107)
FLÓRIO, F.M. (29), (72)
FOGAÇA, P.F.L. (207)
FOGLIO, M.A. (14)
FONSECA, R.B. (19), (21), (75), (80),
(127), (145)
FRAGOSO, W.S. (196), (198)
FRANÇA, I.P. (233)
FRANCESQUINI JR, L. (36), (111), (113)
FRANCHIN, V. (29)
FRANCISCHELLI, T.L. (220)
FRANCISCHONE JUNIOR, C.E. (206)
FRANCISCHONE, C.E. (206)
FREITAS, D.Q. (100), (261)
FREITAS, M.R. (238)
FREITAS, P. (301)
FREITAS, S.E.N. (272)
FREITAS-FILHO, D.L. (278)
FRENTZEN, M. (299)
FRETAS, M.R. (37)
FUJITA, M.G. (13)
FUKUSHIRO, A.P. (96)
FURLANETO, F.A.C. (5), (210), (315)
FURLETTI, V. (285)
FURTADO, L.M. (65), (66), (212)
FURUSE, C.F. (272)

G

GADDINI, H.C.R. (177), (209), (269)
GAMA, F.J.R. (88)
GAMA, M.H. (88)

GAMA, R.S. (69)
GANDINI JR, L.G. (242)
GANDINI, M.R.E.A.S. (248)
GARCIA, P.P.N.S. (162)
GARCIA, V.G. (280)
GAVIÃO, M.B.D. (288)
GIAMPAOLO, E.T. (176)
GIANCRISTÓFARO, M. (219)
GIANNINI, M. (23), (26), (142)
GIBILINI, C. (184), (186)
GIORGETTI, A.P.O. (136)
GIOVANI, E.M. (274)
GIRO, G. (278)
GIROTTI, T. (101)
GOES, D.R. (239)
GOMES, B.P.F.A. (10), (11), (12), (148),
(149), (150), (152), (153), (154), (155),
(156), (157), (158), (159), (160)
GOMES, C.G. (16), (17), (297)
GOMES, P.P. (2), (41), (219)
GOMES, V.L. (73)
GONÇALVES, A.R. (176)
GONÇALVES, M. (277)
GONÇALVES, R. (13)
GONÇALVES, R.B. (72)
GRANDIZOLI, D.K. (54)
GRANER, E. (67), (68), (122), (124)
GREGHI, S.L.A. (60), (279)
GREHS, B. (247)
GREHS, R.A. (247)
GUEDES, F.R. (104), (106)
GUIDI, R. (42), (66)
GUIRADO, C.G. (286), (292)
GURGEL, B.C.V. (57), (59)

H

HADAD, S. (58)
HAITER-NETO, F. (98), (103), (104),
(105), (106), (107), (140)
HANEDA, I.G. (80)
HEBLING, J. (289)
HENRIQUES, G.E.P. (196), (198), (254),
(255), (257), (258), (259), (260)
HENRIQUES, J.F.C. (37), (238)
HERMANN, C. (200), (260)
HERRERA, F.S. (181)
HÖFLING, J.F. (72), (285)
HORBILON, B.Z. (191), (303)
HOSHINO, K.L. (218)
HUNG, R.E. (245), (246)

I

IANNER, K.M. (166), (167)
IKEGAKI, M. (15)
INOCÊNCIO, L.B. (31), (32)
ISHIKIRIAMA, A. (133)
ISHIKIRIAMA, S.K. (55)

J

JACINTO, R.C. (152)
JACKS, J. (45)
JACOB, V.P. (5), (210)
JANSON, G. (37)

JANSON, G.R.P. (238)
JANUNE, D.D.J. (133)
JARDIM, P.S. (135)
JEREMIAS, F. (262)
JOIA, F.A. (49), (175), (178), (313)
JORGE, J. (114), (122), (273), (275)
JORGE, R. (119)
JORGE, R.S. (114), (275)
JORGE, S.L.V. (114), (275)
JORY, M. (220)
JÚNIOR, J.J. (68)

K

KABBACH, W. (51)
KANO, S.C. (197)
KAWATA, L.T. (272)
KIMPARA, E.T. (74)
KLEIN, M.I. (72), (285)
KLUPPEL, L. (7)
KOMORI, P.C.P. (74)
KOO, H. (13), (15)
KORMANN, T. (126)
KOWALSKI, L.P. (120)
KOZŁOWSKI, F.C. (229)
KUKA, M.C. (300)
KURAMOCHI, M.M. (207), (220)

L

L'ASTORINA, C. (168)
LAMBERT, V.O. (76)
LANDGRAF, H. (7)
LANDULPHO, A.B. (194), (204), (205)
LARA, V.S. (115), (301)
LAURINDO, A.C.L. (149)
LAURIS, J.R. (264)
LEITE, A.K. (199)
LEITE, M.F.F. (28)
LELIS, B.C. (195), (223)
LEON, J.E. (71), (116), (121), (122), (124)
LIMA, A.F. (22)
LIMA, D.A.N.L. (27), (139)
LIMA, E.M.C.X. (171), (174)
LIMA, L.L. (283)
LIMA, P.S.F.R. (207)
LINE, S.R.P. (28), (90), (92), (93), (94), (150)
LISBOA, R.B. (110)
LISSO, M.T. (187), (188)
LOPES, A.C. (243)
LOPES, M.A. (68), (118), (119), (273)
LOPES, M.C.A. (222)
LOVADINO, J.R. (138), (139), (179)
LOYOLA, A.M. (42)
LUIZE, D.S. (280)
LUNA, A.H.B. (2), (41)
LUNARDI, N. (38), (241)
LUTGENS, M.M. (183), (186)
LUVIZOTTO, L.D. (155)

M

MACARINI, V.C. (280)
MACEDO, L. (272)
MACEDO, V. (272), (315)

MACHADO, A.L. (176)
MACHADO, C. (49), (175), (178), (313)
MACHADO, J.S. (143)
MACHADO, N.M. (202)
MACIEL, F.J.L. (207)
MAGNANI, M.B.A. (240), (286)
MAIA, I.P.G.R. (180), (192), (193), (311)
MALACARNE, J. (78)
MANCINI, M.N.G. (85), (117)
MANETTA, I.P. (109)
MANIGLIA-FERREIRA, C. (10)
MANTOVANI, R.V. (278)
MANZI, F.R. (86), (88), (106)
MARCANTONIO, A.C. (277)
MARCANTONIO-JUNIOR, E. (278)
MARCHI, G.M. (22), (130), (138), (140)
MARCHINI, L. (123), (163), (256)
MARIANO, R.C. (5), (210), (216), (307), (317)
MARQUES, A.C.L. (117)
MARQUES, L.A.P. (42)
MARQUES, M.R. (86), (87), (281)
MARQUEZ, I.M. (42), (212)
MARTINS FILHO, S.R.C. (168)
MARTINS, Â.G. (304)
MARTINS, L.P. (247)
MARTINS, M.G.B.Q. (103)
MARTINS, R.B. (177), (274)
MASSUCATO, E.M.S. (170), (224), (262), (276), (277)
MATA, G.M. (116), (124)
MATHEUS, R. (147)
MATSON, E. (299)
MATTOS, M.G.C. (73)
MATTOS-GRANER, R.O. (72), (285)
MAURETTE, P.E. (44), (45), (218), (245), (246)
MAZZONETTO, R. (8), (41), (45), (110), (211), (213), (214), (217), (296)
MELLO, R.C. (186)
MELO, W.M. (210), (216), (307), (317)
MELOTI, A.F. (239), (242)
MELOTO, C.B. (49), (175), (178)
MELOTO, C.M. (313)
MENEGHIM, M.C. (112), (142), (229), (233)
MENEGHIM, Z.M.A.P. (112), (229)
MENEZES, L.F. (64), (170)
MENEZES, M.S. (19), (47), (75), (131)
MENINI, M.O. (156), (158)
MERGULHÃO, T.M. (96)
MEROTTI, F.M. (112)
MESQUITA, M.F. (77), (196), (198), (254), (255), (257), (258), (259), (260)
MESSORA, M.R. (5), (210), (216), (315)
MESTRENER, S.R. (25)
MIRANDA, L.I. (111)
MITSUI, F.H.O. (22), (130), (138)
MIYAHARA, G.I. (297)
MOLINA, V.L.I. (232)
MONIZ, N. J., (314)
MONTEIRO, A.A. (270)
MONTEIRO, A.G.V. (24)
MONTICELLI, F. (76)
MORAES, A.B.A. (31), (32), (33), (34), (35), (183), (184), (185), (186), (187), (188), (189)
MORAES, M. (6), (9), (43), (214), (221), (305)

MORAES, M.A.C. (228)
MORAES, M.L. (236)
MOREIRA, A. (164), (165)
MOREIRA, C.R. (301)
MOREIRA, D.M. (150)
MOREIRA, R.W.F. (8), (211), (217), (295)
MOREIRA, R.W.M. (43)
MOSQUEDA-TAYLOR, A.A. (116)
MOTA, A.S. (131), (141)
MOURA, C.C.G. (91), (151)
MOURA, J.S. (171), (174)
MOURA, L.C.L. (111)
MOURE, M.C.R. (61)
MULLER, M.V. (200)
MURAKAWA, A.C. (4), (280)
MUZILLI, C.A. (177)

N

NABUCO, R.B. (170)
NAGATA, M.J.H. (5), (210), (216), (315)
NAKAMÁ, R.E.A. (286)
NAKAOKA, M.M. (257), (259)
NAKAYOSHI, A. (166), (167)
NAPIMOGA, M.H. (285)
NARY FILHO, H. (206)
NARY, P.E. (206)
NASCIMENTO, L.R. (1)
NASCIMENTO, T.D. (298)
NAVARRO, C.M. (182), (263), (265), (268), (271)
NECHAR, R.B. (300)
NERI, A.L. (231)
NETO, E.G.C. (220)
NEVES, E.G. (104)
NEVES, F.D. (52), (73), (141), (190), (191), (203)
NEVES, J.S. (91), (151)
NICASTRO, K.S.M. (147)
NIETO, A.M. (183), (189)
NISHIDA, C.L. (54)
NÓBILO, M.A.A. (174), (199), (254), (255), (258), (260)
NOCITI JR, F.H. (56), (59), (62), (109), (282), (283), (304)
NOGUEIRA, I. (135), (162), (225)
NOGUEIRA, P.S.V. (1)
NOGUEIRA-FILHO, G.R. (109)
NORIEGA, J.R. (79)
NORONHA, L.M. (180), (202)
NOUER, D.F. (38), (240), (241), (250)
NOVAES, P.D. (102), (103)
NOVAIS, V.R. (191)
NOVARETTI, C.R. (115)
NUÑEZ, J.M.C. (90)

O

OKAMOTO, R. (3)
OKAMOTO, T. (3)
OKUDA, K.M. (60)
OLIVA, E.A. (50), (51), (298)
OLIVEIRA JR, M.A. (39), (40)
OLIVEIRA LUIS, V.F. (95), (97)
OLIVEIRA, A.S. (82)
OLIVEIRA, C. (206)

OLIVEIRA, D.P. (12), (149)
OLIVEIRA, E.C.G. (146)
OLIVEIRA, L.V. (257), (259)
OLIVEIRA, M.T. (23), (26)
OLIVEIRA, M.U. (222)
OLIVEIRA, T.F. (89)
ONOFRE, M.A. (64), (170), (262), (267)
ORELLANA, B. (251)

P

PACHECO, M.T.T. (95), (97)
PADILHA, A.C.S. (16), (17), (297)
PADOVANI, G.C. (143)
PAGIN, O. (266)
PAIXÃO, F. (192), (193), (200)
PANELLA, J. (99)
PANTOJA, C.A.M.S. (249)
PARDI, V. (142)
PARDINI, P.V.G. (269), (274)
PASCHOAL, M.A.B. (115)
PASETTO, S. (88)
PASSANEZI, E. (60), (279)
PASSERI, L.A. (2), (6), (9), (219), (221), (305)
PAULILLO, L.A.M.S. (27), (137)
PAZINATTO, F.B. (133)
PEDRONI, C.R. (81), (82)
PEDROSA, E.F.N.C. (100), (261)
PEGORARO, L.F. (54)
PELLEGRINI, F.B. (276)
PEREIRA NETO, J.S. (38), (241), (245), (246), (249), (250)
PEREIRA, A.C. (112), (142), (229)
PEREIRA, C.L. (8), (43)
PEREIRA, F.A. (206)
PEREIRA, F.R. (32), (117)
PEREIRA, J.C. (47), (132)
PEREIRA, S.D.R. (36)
PEREIRA, S.M. (229)
PEREIRA, T. (268)
PEREIRA, V.A.F. (277)
PERERIRA, J.R. (181)
PERES, R.C.R. (90)
PEREZ, D.E.C. (120)
PEREZ, N.C. (176)
PERIS, A.R. (22), (130)
PERUZZO, D.C. (109)
PIANCA, A.L. (224)
PINHEIRO, A.A. (278)
PINHEIRO, C.N. (39), (40)
PINHEIRO, M.L.P. (14), (164), (165)
PINTO, F.R. (57)
PINTO, L.A.M.S. (277)
PINTO, L.R. (302)
PINTO, L.S.S. (67)
PINTO, R.H.R. (108)
PINZAN, A. (237), (238)
PINZAN-VERCELINO, C.R.M. (237)
PIRES, F.R. (120)
POI, W.R. (4)
POLETI, M.L. (128), (234), (235), (237)
PONTUAL, A.A. (105)
PONTUAL, M.L.A. (102)
PORTO, C.D. (163)
PORTO, T.S. (144)
PORTO, V.C. (302)

PORTO-NETO, S.T. (144)
POSSOBON, R.F. (31), (32), (33), (34), (35), (183), (184), (185), (186), (187), (188), (189)
PRADO, C.J. (203)
PRADO, F.B. (84)
PRADO, R.F. (306), (316)
PRESTES, C.S. (57)
PRICOLI, J.J.F. (250)

Q

QUAGLIATTO, P.S. (191), (303)
QUEIROZ, A. C. (57)
QUEIROZ, E.A. (207)
QUEIROZ, E.C. (20), (131)
QUEIROZ, P.A. (134)
QUEIROZ, R.S. (144)
QUEIROZ, V.S. (38), (241), (250)
QUELUZ, D.P. (161), (228), (230), (308), (309), (310)
QUINTEIRO, G. (31), (32)

R

RABANG, H.R.C. (159)
RABELO, G. (44)
RABELO, J.G.R. (51), (298)
RAHAL, V. (25)
RALDI, F.V. (215)
RAMENZONI, L.L. (93)
RAMOS, D.I. (113)
RAMOS, F.M.M. (103), (104)
RAMOS, G.G. (48), (53), (172), (194), (201), (311)
RAVELI, D.B. (239)
RAVEN, F.G.C. (187), (188)
REA, M. (275)
REAL, D.G. (209), (274)
REHDER, V.G. (13)
REIS, A.F. (142)
REIS, A.N. (118)
REIS, M.J. (39), (40)
RELVAS, J.A. (87)
REZENDE, M.L.R. (60), (279)
RIBEIRO, A.L.R. (79)
RIBEIRO, C.S. (204)
RIBEIRO, E.C. (312)
RIBEIRO, E.D.P. (56), (62), (283)
RIBEIRO, F.V. (59)
RIBEIRO, I.W.J. (279)
RIBEIRO, J.G.R. (50)
RIBEIRO, M.C. (49), (175), (178), (313)
RIBEIRO, R. (244), (252)
RICCI, H.A. (135)
RIES, L. G. K. (312)
RIGATTO, H.M. (233)
RINK, M.C.M. (223)
RIZOLO, R.J.C. (3)
RIZZATTI-BARBOSA, C.M. (49), (175), (178), (179), (313)
ROCHA, L.A. (121)
ROCHA, S.S. (79)
RODINI, C.O. (115)
RODRIGUES GARCIA, R.C.M. (171)
RODRIGUES JR., V. (42)

RODRIGUES, J.A. (291)
RODRIGUES, M.M. (195), (223)
ROLIM, G.S. (35), (185)
ROMANI, E.A.P.N. (88)
ROMANI, E.N. (102)
ROPERTO, R.C. (144)
ROSA, L.A.L. (272), (315)
ROSA, L.P. (108), (270)
ROSALEN, P.L. (13), (15)
ROSALES, A.C.M.N. (273)
ROSSATO, C. (276)
RUBIRA, C.M.F. (264)

S

SÁ LIMA, J.R. (215)
SACILOTTO, C.R. (118), (119)
SACONO, N.T. (287)
SADEK, F.T. (76)
SAITO, C.T.M.H. (216)
SAKAI, E. (81)
SAKIMA, T. (236)
SALLUM, A.W. (56), (59), (62), (63), (282), (304)
SALLUM, E.A. (56), (57), (59), (62), (282), (283), (284), (304)
SALMON, C.R. (88)
SALZEDAS, L.M.P. (16), (17)
SAMPAIO, L.P. (239)
SANADA, J.T. (197), (279)
SANCHES, F.F. (195)
SÂNDALO, K. (183)
SANT'ANA, A.C.P. (60), (279)
SANTAELLA, M.R.L.A. (299)
SANTOS FILHO, P.C.F. (24), (47), (141)
SANTOS, A.F.V. (234), (235), (237)
SANTOS, J.G. (80)
SANTOS, J.N. (11), (149)
SANTOS, M.C.L.G. (28)
SANTOS-PINTO, A. (242)
SARACENI, C.H.C. (177), (209)
SARDINHA, S.C.S. (38)
SARTORI, I.A.M. (206)
SARTORI, R. (79)
SAUÁIA, T.S. (159)
SBRANA, M.C. (4), (280)
SCARPARI, C.E.O. (31), (32), (33), (34), (35), (183), (184), (185), (186), (187), (188), (189)
SCARTEZINI, G.R. (7)
SCHEID, M.M.A. (117)
SCHMITD, L.B. (301)
SENA, N.T. (153), (157)
SENE, F. (128)
SERRA E SILVA, F.M. (8), (43), (213)
SERRA, E.C.S. (7)
SGARBI, R.S. (211)
SHINOHARA, A.L. (146)
SHIRATORI, F.K. (133)
SIERAKOWSKI, P. R. (311)
SILVA FILHO, W.L.S. (304)
SILVA, A.A. (124)
SILVA, A.B. (139)
SILVA, A.L.F. (27), (139)
SILVA, A.M. (256)
SILVA, A.P.B. (140)
SILVA, B.B.F. (233)

SILVA, B.M.H. (129)
SILVA, C.C. (290)
SILVA, C.C.E. (267)
SILVA, C.O. (63)
SILVA-CONCILIO, L. R. (313)
SILVA, E.F.A. (231)
SILVA, F. (13)
SILVA, F.A. (48), (53), (172), (180), (193),
(194), (200), (201), (202), (204), (205)
SILVA, F.A.E (192), (311)
SILVA, F.M.L. (195)
SILVA, G.F.B. (238)
SILVA, G.P. (100), (261)
SILVA, G.R. (19), (21)
SILVA, J.R. (5), (210)
SILVA, L.H.G. (49), (175), (178), (313)
SILVA, L.L.B. (53), (193), (192), (194),
(202), (204)
SILVA, M.A.D. (86), (87), (281)
SILVA, M.R. (134)
SILVA, N.R. (127)
SILVA, R.F. (36), (113)
SILVA, W.A.B. (48), (53), (172), (180),
(192), (193), (194), (200), (201), (202),
(204), (205)
SILVA, W.A.B.E. (311)
SILVA, W.J. (171)
SILVA-CONCÍLIO, L.R. (49), (175), (178)
SILVEIRA, D.B. (203)
SIMAMOTO JÚNIOR, P.C. (21), (24),
(132), (134), (141), (190), (191), (303)
SIMONATO, L.E. (16), (17), (25), (297)
SINHORETI, M.A.C. (74), (77), (255),
(257)
SIQUEIRA, V.C.V. (251), (253), (293)
SMITH, D.J. (72)
SOARES, A.J. (154), (155), (160)
SOARES, C.J. (19), (20), (21), (24), (47),
(75), (127), (131), (132), (134), (141),
(145), (190), (191), (303)
SOARES, P.V. (20), (132)
SOBRAL, L.M. (64), (170), (263), (271)
SOBRINHO, L.C. (75)
SONODA, C.K. (4)
SOTTOVIA, A.D. (4)
SOUBHIA, A.M.P. (272)
SOUSA, M.A. (253)
SOUSA, M.L.R. (30), (227), (231)
SOUSA, R.D.S. (175)
SOUSA, R.L.S. (49), (178)
SOUZA FILHO, F.J. (158)
SOUZA JR., J.A. (126), (171)
SOUZA, G.A.B. (267), (276), (277)
SOUZA-FILHO, F.J. (10), (11), (12),
(148), (149), (152), (153), (154), (155),
(156), (157), (159), (160)
SOUZA-SILVA, G.H. (169)
SPINDOLA, H.M. (14)
SPIRANDELI, D. (267)
SPOSTO, M.R. (182), (262), (263), (265),
(268), (271)
STABILE, G.A.V. (211), (214), (217), (296)
STANG, B. (305)
STIPP, R.N. (285)
SUGUIMOTO, R.M. (96)
SUMMA FILHO, F. (158)

SVERZUT, A.T. (9), (295)

T

TABCHOURY, C.P.M. (18), (107)
TAKAHAMA, A.J. (273)
TAMINATO, R.L. (164), (165)
TANGO, R.N. (74)
TAPIA, D.M.M. (220)
TAVANO, O. (99)
TAVEIRA, L.A.A. (306), (316)
TCHEOU, C. (152)
TERRA, E.R. (105), (140)
TIBÉRIO, D. (226)
TOLEDO NETO, J.L. (169)
TOLEDO, D.B. (183)
TOLEDO, S. (57), (284)
TOLEDO, T.B. (30)
TOMITA, L.M. (31), (32), (33), (34),
(35), (183), (184), (185), (186), (187),
(188), (189)
TONOLI, M.L. (226)
TOSELLO, D.O. (85)
TOSTA, M.F.M. (177), (209)
TOTTI, V. (68)
TRINDADE, I.E.K. (96)
TRÓIA-JÚNIOR, M.G. (198)
TUJI, F.M. (102)

U

ÚBEDA, L.T. (264)
UGLICK, I. (240)
UZ, M.V.J. (193)

V

VALLE, A.L. (54), (197)
VANTI, L.A. (207), (220)
VARGAS, P.A. (71), (108), (116), (121),
(124), (270)
VAROLI, F.P. (99)
VASCONCELOS, D.F.P. (86), (87), (281)
VAZ, L.G. (79)
VAZ, S.A.S. (86)
VEDANA, L. (201), (202)
VERGANI, C.E. (176)
VERISSIMO, A.G. (75)
VIANNA, M.E. (148), (153), (154), (157)
VIDOTTI, B.A. (234), (235), (237)
VIEIRA, A.E. (91), (151)
VIEIRA, E.H. (267)
VILLALBA, H. (70)
VIOTTI, A.O. (38), (241)
VOLPATO, M.C. (166), (167)
VOLTARELLI, F.R. (130)

W

WECKWERTH, P.H. (146)
WIEZEL, V.G. (265)

Y

YAEDÚ, R.Y.F. (301)
YAGINUMA, D.J. (271)

YAMASHITA, J.C. (146), (300)
YARID, M.C.D. (241)
YATSUDA, R. (13)
YUJRA,V.Q. (125)

Z

ZAGO, P. M. W. (314)
ZAIA, A.A. (10), (11), (12), (148), (149),
(150), (152), (153), (154), (155), (156),
(157), (158), (159), (160)
ZANATTA, G. (48), (53), (200), (201), (282)
ZANETTA-BARBOSA, D. (212)
ZÂNGARO, R.A. (95), (97)
ZANGRANDO, D. (220)
ZENLY, N.K. (160)
ZUANON, A.C.C. (290)