The application of physical barriers for regeneration of bone defects was first proposed by Dahlin et al. (1988), who reported a technique known as guided bone regeneration (GBR). Currently, the principles of GBR have been used in the repair of bone defects; bone volume increase of resorbed alveolar ridges; development of bone areas for dental implants; associated or not with grafting procedures for post-extraction treatment of dental sockets for immediate implantation; treatment of periimplant fenestrations and dehiscence defects; and treatment of perimplantitis. In this way, GBR has been successfully used to treat some types of bone defects. Problems associated with the procedure, such as premature exposure of the membranes to oral cavity and the consequent contamination. The material of the swine membrane is a bone tissue matrix from the femur of pigs. Swines, including the mini-pigs, present similarities with humans with respect to dental aspects, relative to their morphology, physiology and biocompatibility. The purpose of this work was to provide information on the applicability, biocompatibility and time of absorption by the human organism of swine collagen membrane in regenerative periodontal procedures.

### Oral Rehabilitation

**Bond strength of denture teeth to acrylic resins after microwave irradiation**

Moffa, E.B.; Ribero, R.C.; Vergani, C.E.; Pavara, A.C.; Izumida, F.E.; Giampaolo, E.T.

One of the most usual types of failure in a denture is bond failure between a denture tooth and an acrylic resin denture base. Thus, this study evaluated the bond strength of denture teeth (Vivodent–DV and Biozone–DB; central incisors) to acrylic resins (QC20–QC, Acron MC–AC and Lucitone 550–L) after microwave irradiation. A total of 240 specimens were fabricated, 120 from each brand of denture tooth. All specimens were randomly divided into 4 groups (n=10): G1 (control group) – immersed in distilled water at 37ºC for 48 h, G2 – immersed in distilled water at 37ºC for 48 h and microwaved twice at 650W for 6 min, G3 – immersed in distilled water at 37ºC for 48 h and microwaved daily for 7 days, G4 – immersed in distilled water at 37ºC for 8 days. Shear load was applied to a load testing machine at 45 degrees from the long axis of each denture tooth on the palatal surface at a crosshead speed of 0.5mm/min until fracture. Student’s test (p=0.05) was applied to data for the detection of significant differences between two brands of denture teeth. Most of bond strength values established between DB and the resins were significantly higher than those of DV, except for G1 and G2. For G1, the strength of QC bonded to DV was significantly higher (P<0.05) than QC bonded to DB. No significant difference between L (1.76) and L/L combination (1.72). For G2, the strength of QC bonded to DB was significantly higher than those of DV, except for G1 and G2. For G1, the strength of QC bonded to DV was significantly higher (P<0.05) than QC bonded to DB. No significant differences were observed with both brands of teeth when bonded to AC resin for G1 or bonded to L resin for G1 and G2. However, the variation (%) of bond strength was predominantly lower with DB than DV. In conclusion, DB may be indicated with reliability due to its uniform behavior.

**Misalignment of implant-supported prosthesis in relation to dental arch: 12 years of follow-up**

Coro, V.; Júnior, C.D.S.; Neves, F.D.

The purpose of this study was to warn the dental community about a possible problem in partial implant-supported prosthesis for long periods in function. The misalignment between natural teeth and implant-supported prosthesis on teeth 11 and 12, observed in partial implant-supported prosthesis for long periods in function. The purpose of this study was to warn the dental community about a possible problem in partial implant-supported prosthesis for long periods in function. The misalignment between natural teeth and implant-supported prosthesis on teeth 11 and 12, observed in partial implant-supported prosthesis for long periods in function. The purpose of this study was to warn the dental community about a possible problem in partial implant-supported prosthesis for long periods in function. The misalignment between natural teeth and implant-supported prosthesis on teeth 11 and 12, observed in partial implant-supported prosthesis for long periods in function. The purpose of this study was to warn the dental community about a possible problem in partial implant-supported prosthesis for long periods in function. The misalignment between natural teeth and implant-supported prosthesis on teeth 11 and 12, observed in partial implant-supported prosthesis for long periods in function. The purpose of this study was to warn the dental community about a possible problem in partial implant-supported prosthesis for long periods in function. The misalignment between natural teeth and implant-supported prosthesis on teeth 11 and 12, observed in partial implant-supported prosthesis for long periods in function. This study evaluated the effect of thermocycling on the impact strength of one heat-polymerizing resin (Lactone 550-L) when relined using the same material or the autopolymerizing resin resins UF-Gel Hard (U) and Tokuyama Rebase II (T). The impact strength of intact resin L specimens, before and after thermocycling, was also evaluated. Specimens of L (n=30) were made (60 mm × 6 mm × 2 mm) and relined (2 mm) using the same material (L/L) or the relining resins T/L and U/L. Impact L specimens (n=10) were also made (60 mm × 6 mm × 4 mm). The specimens were then divided into 2 groups: G1 (control – without thermocycling); G2 - specimens were thermally cyclic for 5.000 cycles between 5±2ºC and 55±2ºC. A 0.8mm V-notch was prepared and the specimens were submitted to the impact test (Charpy) using a 0.5 J Charpy pendulum and distance of 50mm between the supports. Data (k/2m2) were analyzed by Kruskal-Wallis test (α=0.05). For both groups, L specimens, G1 (L/L) showed a significant increase in the mean impact strength after relining with T (G1-L9.50; G2-4.71), a decrease after relining with U (G1-L6.67; G2-5.68), and remained unaffected after relining with L (G1-L1.71; G2-L1.54). Only L/L combination (L7.11) showed a decrease after thermocycling (L5.44). Thermocycling had no deleterious effect on the impact strength of the specimens relined with materials T and U, but promoted a decrease when relining was made with resin L. The highest impact strength was observed for L/T combination.

**Impact strength of a heat-polymerizing denture base acrylic resin and two autopolymerizing resin resins**


As denture wearers become older and lose much of their supporting alveolar bone, the need for continuing prosthodontic care such as relining and remaking of dentures is more evident than previously. The relining procedure may affect the impact strength of the denture base and lead to the fracture of the removable prosthesis. This study evaluated the impact strength of one heat-polymerizing denture base resin (Lactone 550-L) and two autopolymerizing resin resins (Tokuyama Rebase-T and UF Gel Hard-U) and the impact strength of specimens of resin L relined with the same material and with the autopolymerizing relining resins was also evaluated. Specimens of L (n=18) were made (60 mm × 6 mm × 2 mm) and relined (2 mm) with the same material (L/L) or with the relining resins T/L and U/L. In addition, intact L, T and U specimens (n=6) were made (60 mm × 6 mm × 4 mm). All specimens were prepared according to the manufacturers’ instructions, and a V-notch was then cut to a depth of 0.8 mm. The impact test (Charpy) was carried out with a pendulum rated at 0.5 J and distance of 50 mm between supports. Data (k/2m2) were analyzed by Kruskal-Wallis test (α=0.01), which indicated that the mean impact strength of resin L (L7.2) was higher than that of resin U (U0.86), which in turn was higher than that of material T (0.69). There was no significant difference between L (L7.2) and L/L combination (L7.2). Compared to the intact resin L, the mean impact strength was significantly increased after relining with T (L7.45), whereas relining with U significantly decreased the mean impact strength (L0.67). The impact strength of resin L remained unaffected after relining with the same material, and was significantly increased after relining with resin T.

**Evaluation of phonetics in prosthodontic patients**

Hilgenberg, P.B.; Saldanha, A.D.D.; Silva, P.M.B.; Calderon, P.S.; Porto, V.C.

Dental procedures must respect esthetics, phonetics, masticatory and deglutition functions, oral functions and the neuromuscular system. The purpose of the present study was to make a literature review of the most important aspects of speech related to dental prostheses. Furthermore, a speech conference list was proposed to be used during dental treatment. Speech is the most complicated response of men, but it is frequently underestimated because its complexity is not apparent. Speech rehabilitation can be done by the reshaping of teeth and palate of the dental prosthesis, reestablishment of the vertical dimension, free functional space and closest speaking space. The sounds are described by the way they are produced and by the articulators they involve. They can be classified as: plosive, fricative, nasal, liquid, affricative, and esthetic, must be replaced, giving back harmony to the stomatognathic system.
be aware of these events not to install a new dental prosthesis with new speech sensations or alterations. To the correct production of sound, it is mandatory that all speech articulators and the stomatognathic system are well-balanced.

**Differential diagnosis in the treatment of orofacial pain**
Silva, P.M.B.; Calderon, P.S.; Saldanha, A.D.D.; Hilgenberg, P.B.; Rodrigues, K.R.; Conti, P.C.R.

The dentist is the professional involved in the diagnosis and management of orofacial pains. The diagnosis, however, can be quite difficult, due to the fact that many painful disorders of non-odontogenic origin can refer pain to the teeth, which frequently lead to wrong treatment strategies. In this scenario, myofascial and neuropathic pain conditions are extremely important. The purpose of this work was to demonstrate, by a case report, the importance of the differential diagnosis in order to determine the origin of pain in orofacial pain patients. The case refers to a 43-year-old female patient, presenting a clinical situation of pain on the left side of the face (supra orbital and lateral to the nose), including the maxillary teeth area at the same side. In this case, the correct diagnosis and treatment were established after the accomplishment of different exams and specific diagnosis tests. The dental professional should be aware of the differential diagnosis because irreversible and expansive treatments are inadequately used in the control of pain of different origins, with economic and biologic consequences to the patient.

**Pharmacotherapy in the management of chronic orofacial pain**
Saldanha, A.D.D.; Hilgenberg, P.B.; Silva, P.M.B.; Calderon, P.S.; Vedolin, GM.; Conti, P.C.R.

Orofacial pains may arise from musculoskeletal, neuromastic, (neuro) vascular, visceral and/or psychiatric origins. Drug selection depends on a variety of factors with the most important factor being an accurate diagnosis. Pharmacotherapy is a cornerstone in the treatment of pain and should be directed towards the source of pain. Various drugs are recommended in the management of orofacial pain as nonopiod and opioid analgesics, corticosteroids, skeletal muscle relaxants, anticonvulsants, antidepressants and anxiolytics. Generally, symptoms of depression, sleep disturbance, stress and drug dependency may accompany chronic pain and must be treated concurrently, associated psychological therapy.

“**Adhesive Endo Crown**” as a therapeutic resource for endodontically treated teeth
Costa, Y.M.; Mondelli, J.; Sábio, S.S.; Ido, V.Y.; Sábio, S.

This study suggests an innovative form of therapeutics as restoration for endodontically treated teeth with great destruction of the coronal remainder. The conventional techniques promote the reconstruction of these teeth with cast metal cores, prefabricated cores or filling cores associated with partial or full crowns depending on the extension of coronal destruction. These treatments have provided quite satisfactory clinical outcomes over time, which have determined their acceptance among the dental class. However, these treatments are expensive and demand several operative stages. In 1999, Bindl, Mörmann presented a therapeutic approach denominated Ender Crown, which proposed the treatment of these teeth in a single session by fabrication of adhesive cores using the Cerec system. This report suggests modifications adapting to the indirect restorative system materials of laboratory use that are more accessible and available to the clinicians, such as modified porcelains or laboratory resins. The modified restorative system presents good clinical perspectives from the functional and esthetic points of view, because it adapts to the conditions of most laboratories and, for this reason, the costs are more accessible to the dentist and patient. However, given the small number of reported cases, it is advisable that indication of this treatment is made only based on well selected clinical situations.

**Rehabilitation by mesial cantilever for preservation of the integrity of the canine: a case report**
Júnior, F.A.A.; Bezzon, O.L.

A favorable treatment to substitute the loss of tooth is the use of a fixed partial denture (FPD) that has both sides supported. The use of distal cantilever is considered an exception because, especially in unilaterally edentulous dentition, it is preferable in relation to removable partial denture (RPD). The mechanics of cantilever FPD requires the abutment adjacent to the replacement tooth to possess suitable periodontal support (Autonoff SJ, 1973) because the greatest functional stress is directed on the nearest abutment (Henderson D et al., 1970). Ewing (1957) cited the following requirements to use of cantilevered PDF: sound periodontal support, satisfactory root morphology and a favorable arch-to-arch relationship. This study report the case of a patient with absence of tooth 24, having teeth 25 and 26 compromised by extensive, unsatisfactory restorations or unfavorable occlusion, however, with tooth 13 completely sound. After clinical-radiographic examination and analysis of the study models mounted in a semi-adjustable articulator, the treatment plan was settled including the fabrication of mesial cantilevered fixed metal partial denture for replacement of tooth 24, having teeth 25/26 as abutments; such planning objectified preservation of 13. In this case the use of implants was not accepted by the patient. In these situations, the usual treatment choices are cantiliever FPDs or RPDs. Although both types of treatment can recover the patient function, the fixed denture, in this case, was better accepted, also for allowing the regularization of the Spee curve. From retrospective studies, it may be concluded that, in spite of new possibilities for implants for the extension of shortened arches or for replacement of anterior teeth, the use of cantilevered restoration to replace a dental loss presents good prognosis and can still be indicated as a safe and simple technique with good longevity.

**Occlusal splint and low-level laser in the control of pain orofacial and in the evaluation of the functional mobility of the lumbar spine**

Physical therapy has currently an important role in functional recovery of patients with temporomandibular disorders (TMD) during clinical and physical evaluation. To help during treatment, low-level laser therapy (LLLT) has been used as an auxiliary resource in pain control. The aim of this study was to demonstrate the importance of the LLLT with occlusal splint appliance, in improving pain control and functional mobility in lumbar spine of 7 patients treated at the “Clinica de Disfunção Temporomandibular e Dor Orofacial em Pacientes Com Necessidades Especiais: Abordagem Multidisciplinar”, of the School of Dentistry of Ribeirão Preto, University of São Paulo (Research Ethics Committee no. 2006.1.411.58.0). An Analogical Visual Scale (AVS) was used together with and postural physical therapy evaluation as initial and final evaluation instruments. The proposed treatment was the association of occlusal splint and 10 sections of LLLT (AlAsGa; 780nm wavelength, 70mW power, 35J/cm² dosimetry). Based on the obtained results, it may be concluded that the therapies used in this study were effective in eliminating orofacial pain and improving lumbar mobility.

**Prosthetic rehabilitation in a patient with pycnodysostosis**
Rezende, M.S.; Oliveira, A.C.S.; Carvalho, P.M.; Guimarães, R.A.P.; Brazão-Silva, M.T.; Marra, D.T.; Costa, M.M.

The pycnodysostosis (PYCD) is a rare skeletal recessive autosomal dysplasia in consequence of altered codification gene of catespana K enzyme. Moroteaux and Lamy first described this alteration in 1963, which may also be called Maroteaux-Lamy syndrome or mucopolysaccharidosis type VI. The main clinical manifestations include low stature of patients, micrognathia, and delay, malformation or mispositioning of teeth. Additionally, ossesous fragility with history of pathologic fractures can often be found. Osteomeylitis represents the most aggravator of complications in consequence of oral problems, being more common in adults that in children. Although clinical and radiographic aspects of this syndrome are well established in literature, reports concerning the oral rehabilitation of these patients are rare. Based on this, this work reports a case of a female patient diagnosed with PYCD emphasizing the oral findings, and describing a supportive treatment comprising patient oral rehabilitation. Occlusal rearrangement was undertaken by fabrication of an overdenture. The outcomes were extremely satisfactory and the treatment was conservative and allowed the establishment of a stable occlusion. Tooth position was not altered, but the inter-arch relationship was improved, provide occlusal stability. This type of prosthesis permits easy cleansing and use in PYCD patients with proper case selection, representing an efficient and safe alternative for rehabilitation of these patients.

The use of magnetic retention as an option for prosthetic rehabilitation of patients with periodontal disease
Leite, P.H.A.S.; Guerra, C.M.F.; Moraes, S.L.G.; Bezerra, C.F.R.; Neto, A.F.; Carreiro, A.F.P.

The magnetos have been constantly used in Dentistry due to their multiple perspectives from the functional and esthetic points of view, and analysis of the study models mounted in a semi-adjustable articulator, the treatment planning objectified preservation of 13. In this case the use of implants was not accepted by the patient. In these situations, the usual treatment choices are cantiliever FPDs or RPDs. Although both types of treatment can recover the patient function, the fixed denture, in this case, was better accepted, also for allowing the regularization of the Spee curve. From retrospective studies, it may be concluded that, in spite of new possibilities for implants for the extension of shortened arches or for replacement of anterior teeth, the use of cantilevered restoration to replace a dental loss presents good prognosis and can still be indicated as a safe and simple technique with good longevity.
the transmission of extreme forces to these structures. The magnets have a simple technique and are easily incorporated to the denture, being the most used the Nd-Fe-B as well as those which associate cobalt and platinum. One of its limitations is its low resistance to corrosion by oral fluids, needing to be coated by another metal, usually titanium. The purpose of this study was to present an alternative treatment for the prosthetic rehabilitation of the pillar teeth with periodontal disease, highlighting the functional, biological and esthetic advantages of the use of magnets in removable partial denture (overdentures).

Benefits of artificial gingiva in a patient with unfavorable labial line and rehabilitated with implant-supported fixed partial denture

Marra, D.T.; Lima, J.H.F.; Carvalho, P.M.; Oliveira, A.C.S.; Brazão-Silva, M.T.; Diniz, P.V.P.; Costa, M.M.

The rehabilitation of patients with implant-supported fixed dentures improves the masticatory performance, and provides more satisfactory results when compared to others dentures. However, the esthetics in some situations is not fully achieved, mainly in cases of accentuated bone loss and unfavorable labial line. In these cases, it is necessary to seek alternatives to meet patients’ requirements and expectations. A viable alternative has been the use of artificial gingiva to promote acceptable esthetics without compromising the cleaning cervical areas of implant-supported dentures. The aim of this work was to report the case of a patient with large exposure of the cervical region of the implants due to little bone availability and unfavorable smile line. In attempt to overcome these problems, a removable artificial gingiva was fabricated and the final results were extremely satisfactory. In conclusion, with proper case selection, this is an additional artificial method to improve the success of this type of prosthesis.

Effect of microwave disinfection on toothbrush wear resistance of denture base resins


This study investigated the wear of Lucitone 550 and QC 20 denture base resins after microwave disinfection. Twenty specimens of each material were prepared (40x20x2mm). The specimens were submitted to successive weighing until constant mass. The specimens were placed in a toothbrush machine with deionizer water/ dentifrice slurry at 1:1 ratio. Each specimen was brushed in a toothbrush abrasion machine using 20,000 brushstrokes. A weight of 200g was applied to the brushes during the test. The specimens were weighed again and the abrasion was calculated (µg) by the difference of initial and final weight. Prior to toothbrushing, the specimens were divided into 2 groups: G1 (control group)- immersed in distilled water for 48 hours and G2 - immersed in distilled water for 48 hours and submitted to 2 six minutes microwave disinfection cycles at 650W. This procedure simulated denture disinfection before laboratorial adjustments to prevent cross contamination. The results were subjected to ANOVA, Levene and Shapiro Wilk test (α=0.05). There was no significant difference between the experimental and the control groups. In conclusion, loss of mass of denture resins was not influenced by microwave disinfection.

Acting prosthesis for reestablishment and diagnosis of diminished vertical dimension of occlusion

Diniz, P.V.P.; Oliveira, A.C.S.; Arantes, F.N.; Brazão-Silva, M.T.; Rezende, M.S.; Marra, D.T.; Prado, C.J.

The rehabilitation of individuals with diminished vertical dimension of occlusion (VDO) is still a great challenge to dentists. Firstly, it is necessary to make a correct diagnosis. Clinical situations in which there are few and severely destroyed remaining teeth and irregular occlusal plane with reduced VDO present esthetic, chewing, phonetic deficiencies, usually associated with fibromyalgia. Therefore, the foremost steps are to reestablish these functions, especially VDO, and to evaluate them during a certain period. Then, the definitive rehabilitative treatment can be planned only after the dentist is sure that the “new” VDO is comfortable to the patient. An alternative to reestablish VDO, centric relation and recovery stability and occlusal harmony is the use of overlay. This case report presents the clinical and laboratory phases of the fabrication of this denture modality and discusses its advantages and indications. This type of denture is of easy and fast fabrication and has a high cost-effectiveness ratio.

Immediate reconstruction of a severely abraded dentition using an overlay: provisional and definitive treatment phases

Júnior, A.C.F.; Oliveira, A.P.L.; Verde, M.A.R.L.; Rocha, E.P.; Silva, A.M.

The oral rehabilitation in patients with severely abraded dentition has been a great challenge for the dentists, mostly for those less experienced. These teeth excessively worn are usually associated to parafunctional habits like bruxism, that is more prejudicial in association with others problems, like tooth erosion. The loss of vertical dimension of occlusion, the occlusal instability and the loss of anterior guidance occasioned by the excessive tooth wear might damage the stomatognathic apparatus’ biology, function and esthetics. Then, a correct diagnosis and treatment planning of the case are crucial to control and reestablish the apparatus’ harmony. This situation prompted studies to develop effective therapies for the treatment and control of parafunctional habits, which can involve the muscles, the temporomandibular joint and the teeth. Thus, the purpose of this report was to describe the therapy used in a patient with severely abraded dentition caused by bruxism associated with tooth erosion, with satisfactory bone support and gingival health, but with loss of vertical dimension of occlusion and posterior bite collapse. In the provisional treatment phase, a vertical dimension reestablishment plate was made to the immediate recovery of the function and esthetics. It is a reversible and no invasive treatment with a lower cost. After a 2-month surveillance period and the patient being asymptomatic, the definitive rehabilitation phase started, involving conjugated fixed and removable partial dentures. The patient’s self-esteem recovered and he returned to his society circle.

Biological and biomechanical aspects of the cone-morse implants

Maior, B.S.S.; Filho, R.V.; Netto, B.P.; Assis, N.M.S.P.

In view of some discussed and demonstrated complications in the literature, especially problems of marginal bone resorption, loosening and fracture of screws, and aiming at increasing the stability in the implant-crown interface, new designs of prosthetic connections between crown and implant were introduced to the market to meet esthetic and functional demands. Implants with internal connection, with Morse taper characteristics provide a reinforced connection between implant and abutment, generating a cold welding among those elements, absence of microgap and increased resistance to micro-movements providing a rigid connection. The objective of this study was to demonstrate the biological and biomechanical behavior the implants and prosthetic components of the cone-morse system.

Acrylic resin removable gingiva: a simple and esthetic alternative to replace anterior periodontal tissues

Neto, A.F.; Amural, B.A.; Branco, N.; Morais, S.; Guerra, C.M.F.; Aquino, L.M.M.; Carreiro, A.F.P.

The use of conjugated fixed/removable partial dentures is an excellent alternative to solve esthetic and functional problems in Kennedy Class I patients. A 59-year-old patient came to the dental clinic of the Dental School of Ingá complaining of esthetic discomfort and functional difficulties. The intraoral examination revealed that teeth 16, 17, 18, 26, 27, 28, 34, 35, 36, 37, 38, 46, 47 and 48 were missing. Case planning determined the fabrication of fixed dentures joining all the remaining teeth of the maxillary arch, which presented with poor esthetics due to staining and fractures, conjugated with a removable plug-in denture in the molar region. A conventional removable denture was constructed for rehabilitation of the mandibular arch. It may be concluded that this technique allows the dentist joining the high-quality esthetics of porcelain in the anterior region with the best force distribution provided by removable partial prostheses compared to cantilevered fixed dentures.

Analysis of relative artificial tooth position changes during specific upper denture processing phases by means of computer graphs

Sturion, L.; Ortolani, A.P.S.; Shibayama, R.

Artificial tooth position changes were investigated during upper complete denture processing. QC 20 (Dentply) and Onda Cryl (Clássico – specific for microwave energy) resins were used and flashed in type II gypsum stone mould or silicone mould, polymerized in hot water bath as well in microwave polymerization. Forty specimens were used, which were obtained from one standard cast, and divided into four groups (n=10) that were processed as follows: a) group I: flashed in metallic flasks with gypsum stone barrier and conventional polymerization. b) group II: flashed in glass fiber flasks with gypsum stone barrier and polymerization by microwave energy. c) group III: flashed in metallic flasks with silicone barrier and conventional polymerization. d) group IV: flashed in glass fiber flasks with silicone barrier and microwave polymerization. An acrylic resin guide was used to detect tooth displacements, this guide was marked with 5 predetermined points in teeth
cupps that has proportionate reference points in the replicates. These points were used to measure, using AutoCad software, tooth displacements by digitized occlusal surface of the teeth. Based on the results and according to the employed methodology, the following can be concluded: 1. Tooth position changes occurred after denture processing in all experimental groups. 2. The technique of flashing with silicone mould and microwave polymerization (group 4) presented minimal degree of tooth position changes during all the processing. 3. The segments that constitute the smaller triangle represented by the points of teeth 15, 21 and 25 showed more homogeneity and linearity than the larger triangle represented by the cupps of teeth 17, 21 and 27. 4. The use of silicone mould instead of gypsum stone mould for total denture flashing resulted in minor degree of dimensional changes regardless to the method of polymerization.

Immediate complete denture: a clinical option in immediate rehabilitation of patients with advanced periodontal disease

Guimarães, R.A.P.; Gomes, V.L.; Miranda, P.; Oliveira, A.C.S.; Brazão-Silva, M.T.; Rezende, M.S.; Gonçalves, L.C.

Periodontal disease is a bacterial infection that affects the periodontal tissues of the teeth. Based on the results and according to the employed methodology, the following can be concluded: 1. Tooth position changes occurred after denture processing in all experimental groups. 2. The technique of flashing with silicone mould and microwave polymerization (group 4) presented minimal degree of tooth position changes during all the processing. 3. The segments that constitute the smaller triangle represented by the points of teeth 15, 21 and 25 showed more homogeneity and linearity than the larger triangle represented by the cupps of teeth 17, 21 and 27. 4. The use of silicone mould instead of gypsum stone mould for total denture flashing resulted in minor degree of dimensional changes regardless to the method of polymerization.

Electromyographic activity of the masseter and temporal muscles of individuals with complete denture, partially edentate and dentate


Alterations in the masticatory performance and the activity of the masticatory muscles can occur due to tooth absence, inadequate conditions of remaining teeth or poorly adapted complete denture. The purpose of this study was to analyze the electromyographic activity of the right and left masseter and anterior temporal muscles (LT, RT, LM, RM) in different groups. Three groups were formed: group 1 (n = 9) - individuals with complete denture; group 2 (n = 9) - individuals with absence of at least 10 teeth; and group 3 (n = 9) - dentate individuals. The analysis was performed using a Myosystem Br-1 electromyographer to record the rest position, mandibular movement and bite force of the collectors. The means of the collected data were normalized by the maximum voluntary contraction (4 seconds) and the results were analyzed statistically using SPSS software. Analyzing the rest, the right laterality, left laterality, protrusion and bite force positions, the differences were significant at p<0.01, group 2 presenting the highest electromyographic means. It may be concluded that group 2 had greater muscular static fibre conscription for the execution of the requested activities, probably, for the inadequate occlusal conditions presented by this group.
Immediate rebase of class I removable partial denture: case report


The rehabilitation of Kennedy Class I patients, employing remove partial dentures (RPD), is a very great challenge for the dentists, mainly concerning the posterior control of the prosthesis, because over the years, there is a tendency to loosen the adaptation from the basis of the prosthesis in relation to the alveolar ridge, due to the physiologic process of bone resorption. There are several factors related to the bone resorption process from systemic problems of the patients until imperfections on the prosthesis basis to the ridge may result in instability of the prosthesis, alterations on the centric occlusion, vertical dimension of occlusion reduction, metallic structure, loss of adaptation, occlusion strength, excess on the anterior teeth, TMJ alterations, tissues trauma and impaired mastication this way, recognizing that bone resorption is a known process and also irreversible, it becomes indispensable the performance of some procedures for the posterior control of these prostheses and one of these includes the performance of periodic rebase. Rebase is a clinical and laboratorial procedure employed to recover the prosthesis basal surface to the residual ridge, by filling of these structures with appropriate material. Thus it is possible to maintain the occlusal fitness, to favor the retention and stability to avoid damage to the tissues, to recover masticatory efficacy, avoid food accumulation between the prosthesis basis and the ridge, to eliminate the discomfort of lack of stability and favor the cleansing. This way, the objective of the present work was to describe the rebase procedure results from the basis of a RPD presenting edentulous ridge by the immediate technique which is applied directly on the oral cavity by use of autopolymerizing acrylic resin.

Assessment of bond strength of thermally activated acrylic resin teeth after the action of ultrasound and disinfecting solutions

Ribeiro, A.B.; Mian, H.; Sato, S.; Silva, F.B.; Pedrazzi, V.

All prosthetic pieces must be carefully treated in order to maintain their biosafety and prevent cross-infections. On the other hand, the influence of physical and chemical treatment on bond strength of artificial teeth to acrylic denture bases is still a challenge. The purpose of this study was to compare the shear bond strength of double- and triple-layer artificial teeth (Biolux® and Trilux®) after the action of disinfecting solutions (Listerine®, Cepacol®, Periogard®, enzymatic crust remover - Riozyn® II® and 1% sodium hypochlorite and tap water, as a control) plus ultrasonication. Seventy-two specimens from each tooth type were obtained and included in cylindrical heat polymerized resin bases, originating 12 groups. Six of those groups were ultrasonicated with disinfectants for 4 cycles, 15 minutes each; the other 6 groups were immersed in the solutions for the same period of time. Bond strength means were obtained by means of a shear test in a 2000 DL universal testing machine and the results were converted into MPa. The double-pressed acrylic teeth presented shear bond strength means of 3.43 MPa, while the triple pressed acrylic teeth had shear bond strength means of 3.02 MPa. Statistical analysis using ANOVA and Fisher’s LSD multiple-comparison test confirmed that triple pressed acrylic teeth presented lower bond strength when submitted to disinfectants in both assayed situations in comparison to the double pressed teeth. It may be conducted that ultrasonication and the tested disinfectants did not affect the bond strength of both types of studied acrylic teeth. The double pressed acrylic teeth presented higher shear bond strength than the triple pressed teeth.

Application of a rotational removable partial denture on the dental clinic: case report


The rotational removable partial denture is characterized by the presence of two different axis of insertion in one single piece. Thus, the rests are positioned in two different axis of insertion in one single piece. This way, the objective of the present work was to describe the rebase procedure results from the basis of a RPD presenting edentulous ridge by the immediate technique which is applied directly on the oral cavity by use of autopolymerizing acrylic resin.

Oral rehabilitation with implant-supported prostheses: a case report

Borges, A.F.; Rego, M.R.M.; Costa, L.C.S.; Mota, A.S.

A 67-year-old female patient presented with totally edentulous mandible and partially edentulous maxilla, with remaining teeth 13, 12, 11, 21, 22 and 23 restored with metal ceramic restorations. These restorations were inadequate functionally and esthetically, with pronounced buccal inclination. Radiographically, images suggestive of root fracture were observed on teeth 11, 12 and 13, in addition to poor periodontal implantation of all six remaining teeth. During planning and diagnosis, it was decided for the extraction of the remaining teeth and for the installation of osseointegrated implants and immediate fixed prostheses for the maxillary and mandibular arches. For determining the correct buccolingual position of the prosthetic elements of the provisional restoration, a Steiner cephalometric tracing was used for positioning the central incisor because the remaining teeth were not a good esthetic or functional reference as they were buccally tipped. Thus, surgical procedures were accomplished for extraction of the maxillary anterior teeth and for immediate installation of the osseointegrated implants (Neodent®) in the region of the teeth 13, 11, 21 and 23. These implants presented initial stability higher then 35 Ncm and were used as supports for an immediate fixed provisional restoration replacing the teeth from 15 to 25. Four more implants were installed in the posterior maxillary regions, but did not present enough initial stability for immediate load. After 30 days, a new surgical procedure was accomplished for the installation of four osseointegrated implants (Neodent®) in the mandibular anterior region. Over these implants a fixed complete provisional restoration was installed, replacing the teeth from 36 to 46. The patient is now in the healing phase to allow the beginning of the fabrication phase of the definitive restorations.

Effects of adhesive permeability, substrate hydration and polymerization mode on the bond strength of dual resin cements to dentin

Vidotti, H.A.; Carvalho, R.M.; Pegoraro, T.A.

This study investigated how reduction of water flow across the adhesive may affect coupling of resin cements with different curing modes to dentin. Indirect resin cements were prepared and cemented to exposed, hydrated, flat dentin surfaces of human third molars using Panavia F (PAN) and Bisite II DC (BIS), with either the chemical (CC) or the light (LC) curing mode, as per manufacturers’ instructions (control). One experimental group was prepared in a similar way, except that a layer of a non-acidic adhesive resin (Scotchbond Multi-Purpose Plus #3 - ESABMP) was placed on the bonded dentin surface before luting procedures. Another experimental group was prepared with additional teeth that were dehydrated in ethanol (ExD) and bonded according to the manufacturer’s instructions. Bonded teeth were stored in water for 24 h at 37°C, sliced into beams of 0.8 mm² and tested in tension at 0.5 mm/min. Means were obtained in MPa ± SD and data analyzed by two-way ANOVA (p < 0.05). Capital letters/luting conditions; lower cases/materials conditions. Mean ±SD values for groups were as follows: CONTROL: PANCC, 25.3 ± 8.5Aa; PANLC, 23.3 ± 11.3Aa; BISCC, 26.2 ± 13.5Aa; BISLC, 33.8 ± 16.0Baa; ESABMP: PANCC, 35.6 ± 15.6Bb; PANLC, 18.7 ± 9.5Aa; BISCC, 18.4 ± 9.7Aa; BISLC, 31.5 ± 12.0Baa; ExD: PANCC, 43.1 ± 11.0Bc; PANLC, 40.6 ± 12.2Bb; BISCC, 38.9 ± 12.2Bb; BISLC, 49.9 ± 11.8Bb. Reduction of water flow across adhesive by application of a non-acidic adhesive may not result in improved bond strength for all dual resin cements. Eliminating water from the substrate seems to be the most effective way to improve coupling of resin cements to dentin, regardless of the curing protocol.

Oral rehabilitation by osseointegrated implants in a patient with dental agenesis: case report


Dental agenesis is relatively common on daily clinic and its resolution is problematic as far as esthetics is concerned. The osseointegrated implant is a more biological solution in resolpment recent proposals, but also a more esthetic result, mainly when associated with full porcelain crown in this clinical case, a 19 year old patient, searched for dental care looking improving her physical esthetic and mastication function. After a rigorous clinic and radiographic examination, it was observed that the maxillary first premolars were missing, and the patient had the primary first molars with complete root resorption. The treatment possibilities were analyzed and, considering the esthetics and the effectiveness of
the results, the proposal was the installation of osseointegrated implants and subsequently implant-supported full-porcelain crowns. In this case of dental agenesis, the dental rehabilitation with osseointegrated implant and full-porcelain crown appeared as the best treatment modality because it met the patient’s esthetic expectations, providing harmonic esthetics, preserving the integrity of the adjacent teeth and avoiding local bone resorption (because of the presence of the implant) and consequent activation and bone remodeling.

The role of myofascial pain in the etiology of chronic headaches

Conti, T.R.; Silva, R.S.; Nunes, L.M.O.; Gelmini, M.; Conti, P.C.R.

Myofascial pain (MFP) is a regional neuromuscular disorder characterized by the presence of hypersensitive points in the muscles (trigger points - TrP), being one of the most common causes of chronic orofacial pain. TrP can refer pain to a zone of reference and the patient may feel this pain as a headache. The aim of this study was to evaluate the role of MFP as a contributing factor to the etiology of chronic headaches in 316 patients. Headache diagnosis was established using the guidelines of the International Headache Society. MFP diagnosis was established performing palpation of the masticatory and cervical muscles in order to find TrP that would reproduce the headache. The results were submitted to percent analysis and showed that 24% of the patients could be diagnosed with tension type headache (TTH), 14% migraine, 58,5% TTH with some episodes of migraine and 3.5% with other headache types. Furthermore, 74.5% of the patients could be diagnosed with MFP and in 94.5% of these patients, headache could be reproduced during palpation of the TrP. Regarding the TrP that reproduced the headache, 60% were found in temporals muscles. TTH was the type of headache with the higher reproducibility. However, migraine could also be reproduced in 35.7% of the patients diagnosed with it. The authors concluded that MFP is one of the contributing factors associated to chronic headaches, thus a clinical examination performed to diagnose this disorder would be recommended in chronic headache patients.

Implant-supported metal-ceramic crown on maxillary anterior region: case report

Miyashiro, M.; Suedam, V.

With the introduction of the “metal free” prostheses, metal-ceramic crowns have been related to several esthetic failures in the maxillary anterior region. In fact, these failures are due to an inadequate planning in metal-ceramic prostheses. The lack of thickness to apply an adequate porcelain layer, associated with lack of dentist’s skills, lead to a poor esthetic result. In implant-supported prostheses, the application of an ideal porcelain layer on the cast metal provides a more favorable esthetic effect, making the crown practically imperceptible. The goal of this work was to describe a case in which an implant-supported metal-ceramic crown was made on the maxillary incisor region. Patient missing the maxillary left central incisor due to coronal fracture and posterior root fracture sought treatment. After tooth removal and alveolar bone new formation, the implant was fixed (3 implant Innovations Inc.). After 6 months of osseointegration, a reopening procedure was performed and, 15 days later, a provisional restoration was made for gingival conditioning providing an adequate gingival contour. After that, color selection and transfer impression were done for the confection of a cemented metal-ceramic crown on a milled prefabricated titanium abutment. Porcelain esthetics was adjusted for shape and texture. After glaze, the crown was fixed with provisional cement. The cemented implant-supported metal-ceramic crown for maxillary anterior region was well indicated with no esthetic loss for the patient, following the guidelines of esthetics and biology.

Palpation of the lateral pterygoid area on detection of myofascial pain: sensitivity and specificity

Conti, T.R.; Silva, R.S.; Nunes, L.M.O.; Gelmini, M.; Conti, P.C.R.

RDC/TMD has been considered the gold standard in research as a way to diagnose TMD and its subgroups. Surprisingly, the intraoral palpation of the lateral pterygoid area was sought treatment. After tooth removal and alveolar bone new formation, the implant was fixed (3 implant Innovations Inc.). After 6 months of osseointegration, a reopening procedure was performed and, 15 days later, a provisional restoration was made for gingival conditioning providing an adequate gingival contour. After that, color selection and transfer impression were done for the confection of a cemented metal-ceramic crown on a milled prefabricated titanium abutment. Porcelain esthetics was adjusted for shape and texture. After glaze, the crown was fixed with provisional cement. The cemented implant-supported metal-ceramic crown for maxillary anterior region was well indicated with no esthetic loss for the patient, following the guidelines of esthetics and biology.

Effect of experimental chewing on the masticatory muscle pain onset

Leme, V.S.P.; Silva, R.S.; Nunes, L.M.O.; Yassuda, S.; Conti, P.C.R.

Muscle pain is the most prevalent of TMD subtypes. There is no consensus whether or not mastication can produce or aggravate muscle pain. The goal of this study was to analyze the effect of an experimental chewing exercise on the masticatory muscle pain.

The test detected 2 groups: 44 in the myofascial pain group and 33 without TMD signs and symptoms physical examination protocol to detect myofascial pain disorders, according to the RDC/TMD has been considered the gold standard in research as a way to diagnose TMD and its subgroups. Surprisingly, the intraoral palpation of the lateral pterygoid area as part of the physical examination protocol to detect myofascial pain disorders, according to the RDC/TMD. Seventy-seven consecutive women, matched for age, were divided into 2 groups: 44 in the myofascial pain group and 33 without TMD signs and symptoms TMD (control group). One calibrated examiner blinded to the groups performed 2 intraoral palpation of the lateral pterygoid area on each side, with a 5-minute interval between palpations. The responses were scored as 1 if negative and 0 if positive. If there was a tie, a third assessment was then performed. The sensitivity, specificity, negative and positive predictive values were calculated for analysis. The test detected 45.45% of true positives, 9.74% of false positives, 33.12% of true negatives and 11.69% of false negatives. Sensitivity and specificity were calculated as 79.55% and 77.27%, respectively. The specificity was bellow the 90% recommended by the literature, indicating a high number of false positive results. Positive and negative predictive values were 82.35% and 73.91%, respectively. The method used by the RDC/TMD criteria to make a myofascial pain diagnosis should be revised, based on the findings of the present study, specially the very low specificity. Further investigation is necessary to confirm these results. The authors wish to thank FAPESP - Brazil - Grant #04/13160-7 for the financial support.

Functional and esthetic immediate rehabilitation in an aged patient with osteoporosis

Alves, S.V.; Montandon, A.A.B.; Fais, L.M.G.; Tiberio, D.; Santos, M.T.B.R.; Pinelli, L.A.P.

The treatment of an aged patient with dental integrated requirements demands a multidisciplinary and individual vision that is planning for your reality. The patient O.V.C., 70 years old, with osteoporosis diagnosis, looked for dental treatment because of dissatisfaction with her chewing efficiency and esthetics, muscular fatigue, temporomandibular joint pain, in addition to pain in spinal column and legs. The aim of this study was to show the specificity and importance of an exam that includes an evaluation of the systemic condition, use of medicaments, cognition (Mini Mental State Examination), depression level (Geriatric Depression Scale) and dental exam in the proposed and executed treatment. After rigorous clinical interview, it was observed that the patient did not present indications of cognitive compromising or depression, but she was very anxious for an improvement of the functional and esthetic conditions. There was the need of recovery of the reverse curve of the smile, vertical dimension of occlusion and accentuate wear in the teeth of her removable dentures. However, due to the strong pain, the treatment needed to be accomplished in four sessions. The treatment involved periodontal procedures, recovery of the vertical dimension of occlusion with acrylic resin on the posterior teeth of her removable dentures, cosmetic dentistry for incisal guide determination, and placement of acrylic resin veneers in the anterior teeth of the maxillary denture. It was concluded that, with the proposed treatment, the smile and the patient’s chewing efficiency was recovered temporarily in a satisfactory way, contributing to a better planning of the definitive rehabilitation and with positive results for the patient’s quality of life.

Stress distribution in implant-supported RPD: periodontal ligament influence on internal stress distribution - FEA analysis

Archangelo, C.M.; Pereira, J.A.; Junior, M.M.; Junior, A.C.F.; Rocha, E.P.

The application of diverse hypotheses in a finite element analysis (FEA) model has been critical to obtain precise results in the treatment with implant-supported removable partial denture (RPD). In view of this, the aim of this study was to assess, by means of a two-dimensional FEA, the internal stress distribution of a distal extension RPD (DERPD) associated with an osseointegrated implant, considering the homogeneous and non-homogeneous reproduction of the periodontal ligament (PL). For such purpose, 6 models (M) were created, representing the following: MA – hemi-arch containing tooth 33 only and the edentulous distal alveolar ridge; MB – similar to MA, but with DERPD replacing the absent teeth; MC – similar to MB,
with an implant (3.75 x 10.0 mm) supporting the denture in the posterior region; MD, ME and MF – similar to models A, B, and C respectively, except for PL, which was modelled in a non-homogeneous form, considering the following 4 groups of fibers: crest, horizontal, oblique and apical. Like this, as result, the maximum stress concentrations (in MPa) were as follows: MA (58.976); MB (77.863); MC (207.195); MD (110.33); ME (191.36) and MF (326.60); the non-homogeneous PL highlighted the benefits of the implant, drastically reducing the stress value in the posterior 3% of the alveolar ridge; furthermore, the variation in the acting stresses was lower under the non-homogeneous condition. The conclusions were: The PL in the non-homogeneous form emphasized the benefits of the osseointegrated implant in relation to the abutment structures in a more pronounced manner than the homogeneous condition, and is essential for obtaining results that corroborate the previous clinical data as the maximum stress values, the variations among the models and the internal stress distribution were found to be in agreement with those established by the literature.

Pain and electrical activity of anterior temporal and masseter muscles across menstrual cycle in oral contraceptive users and non users

Batista, F.R.S.; Garcia, A.R.; Sundefeld, M.L.M.M.; Zuim, P.R.J.; Morì, G.G.; Turció, K.H.L.

Electric activity and pressure-pain threshold of the anterior temporal and masseter have been used in the diagnosis of some disorders that cause pain, such as the temporomandibular disorders (TMD). As the majority sufferers of the TMD are women, it is possible that hormone fluctuation across menstrual cycle predisposes to these disorders. The aim of this study was to analyse the electrical activity and pressure-pain threshold of anterior temporal and masseter muscles across menstrual cycle. Twenty-eight women at reproductive age were selected to the research. Thirteen were oral contraceptive users, and 15 were non users. All of them answered a questionnaire and were submitted to electromyographic exams and algometry of the muscles during three consecutive menstrual cycles. The results permitted to verify that pressure-pain threshold and the electrical activity of both muscles during rest and during chewing did not demonstrate statistically significant difference across menstrual cycle. However, work side temporal activity was significantly more elevated in oral contraceptive users than in non users. It may be concluded that pressure pain threshold and electrical activity did not vary during different phases of menstrual cycle, but anterior temporal muscle demonstrated significantly higher activity in oral contraceptive users.

Parafucntional habits and the stomatognathic system

Cunha, C.O.; Lima, R.T.; Bonfante, G.

The functional activities of the stomatognathic system are described as chewing, swallowing, phonation and breathing. However, part of these activities is parafunctional. This kind of parafunctional activity damages the structures of the system from the moment at which it exceeds the individual’s physiologic tolerance. Likewise, physiological increase and signals that parafunctional activity can cause vary for each person. It is also known that these habits can be destructive in terms of physical, emotional and/or social effects. The parafunctional habits (PH) can occur during awake and/or during sleep. During awake, the habits are accomplished, generally, unconsciously and include tooth clenching and grinding, lip, tongue and cheek biting, chewing gums and drops, nails and objects biting, tongue thrusting and jaw play. During sleep, the unique PH accomplished is bruxism. During the last decades, several authors have demonstrated that damages to the stomatognathic system affect mostly teeth, periodontium, muscles and temporomandibular joint (TMJ). Recently, in 2005, Glorés et al. et al. notified that dental wearing and/or fracture occurs due to prolonged occlusal contact accomplished during tooth clenching and grinding, or also due to biting of nails and objects. These PH can damage periodontal tissues, which can react with dental movements and progressive mobility. In 2006, Winocour stated that PH are risk factors for temporomandibular disorders. Damages to muscular tissues and TMJ separately or conjunctly, were related to PH of chewing gum and jaw play, among others. Studies noted that there is a great relation among habits and the emotional tensions, mainly stress and anxiety. The aims of this work were to present the identification of PH and the damages that PH can cause to the stomatognathic system, and suggest means to diminish or eliminate the occurrence of PH and their possible damages.

Periodontology and Prosthesis integration in the planning of implant-supported dentures and fixed partial dentures, aiming at excellent anterior esthetics


Patients are more demanding with dental treatment in relation to esthetic, functional and biological aspects. Therefore, a comprehensive analysis about teeth, lips, gingiva and face is necessary to oral rehabilitation success and to provide a harmonic smile. The interaction of gingival tissues and teeth is fundamental to optimal esthetics of prostheses when the anterior superior region is involved. Thus, care with periodontal tissues is important in prosthodontic planning to obtain esthetics, function, better hygiene and good phonetics. The formation of interdental or interimplant papilla and the reconstitution of gingival concave arch are goals of current Dentistry in order to optimize the final aesthetic aspects in implant-supported dentures and fixed partial dentures, making that the prothetic pieces mimic the natural dentition in relation to their emergence profile. The aim of this work was to discuss several techniques of planning, such as gradual pressure, surgical techniques and artificial gingiva, aimed at achieving a better relationship between periodontal tissues and prostheses.

Occlusal adjustment after orthodontics: case report

Camargos, G.V.; Neto, A.J.F.; Rodrigues, M.M.; Silva, M.R.

Occlusal adjustment has had a long and troubled history because of empirical approaches owing to unfamiliarity with the acceptable biological principles (total function of the stomatognathic system), introduction of the concept of bilateral balanced occlusion and practice of prophylactic adjustment. The therapeutic behavior for occlusal adjustment considers modifications in the occlusion (on the surfaces of teeth, restorations or prostheses) by means of selective dental tissue removal or addition of restorative materials, seeking to harmonize the functional aspects of the mandibular complex in centric relation occlusion and the functional relations of the mandible.

This technique is indicated when signs and symptoms of traumatic occlusion are present and the occlusal relations can be improved by the adjustment, before extensive restorative treatments, and for stabilization of the outcomes of orthodontic treatment and oral and maxillofacial surgery. In this context, the patient of this case presented signs of bone and dental structure loss (abfraction and wear facets) resulting from a traumatic occlusion after orthodontics. Thus, with the primary objective of improving the functional relations of the dentition, so that the patient could undergo periodontal esthetic surgery, occlusal adjustment was indicated to establish the anterior guide in the mandibular eccentric movements, eliminating the occlusal interferences. This approach was preceded by the clinical stages of taking impressions, obtaining the study models for further assembly in a semi-adjustable articulator, and mapping the interferences in the articulated models. After completion of the adjustment, canine guides were obtained as well as occlusal stability.

Interrelation between Prosthodontics, orthognathic surgery, and dental implants in oral rehabilitation of subjects with cleft palate

Andrade, P.C.A.R.; Pinto, J.H.N.; Mazzotti, R.; Lopes, J.F.S.

Reverse planning has an extreme importance on implant-supported prosthesis. Planning gives subsidies necessities to evaluate ways to manage and execute restorative treatments, and for stabilization of the outcomes of orthodontic treatment and oral and maxillofacial surgery. Thus, with the primary objective of improving the functional relations of the dentition, so that the patient could undergo periodontal esthetic surgery, occlusal adjustment was indicated to establish the anterior guide in the mandibular eccentric movements, eliminating the occlusal interferences. This approach was preceded by the clinical stages of taking impressions, obtaining the study models for further assembly in a semi-adjustable articulator, and mapping the interferences in the articulated models. After completion of the adjustment, canine guides were obtained as well as occlusal stability.

Tooth-implant union in oral Prosthodontics: report of two cases

Paula, G.A.; Neves, F.D.; Prado, C.J.; Mota, A.S.

Prostheses with tooth-implant union are a reason of controversy in Dentistry and require more studies. However, in certain clinical situations, these prostheses are employed in the same cost-effectiveness level as that of other prosthetic solutions. Thus, the patient, duly informed of the complexity of its clinical situation, will opt for the best treatment modality, and the tooth-implant union may be the most indicated. In this context, this work reports two longitudinal follow ups (8 and 5 years) of prosthetic rehabilitation, showing the success of this type of union. In the first case,
Xavier, A.; Pimentel, T.F.; Simões, R.C.S.; Silva, R.P.R.; Merlini, S.P.; Bastos, J.R.M.

The present study aims at presenting an educative-preventive experience work carried out in a playful manner in the formation of a multidisciplinary and integrated team with the goal of offering dental caries is strongly associated with the socioeconomic conditions. In addition to receiving little oral health care, children from low-income families can also have growth deficits. The objective of this study was to evaluate the influence of the socioeconomic level on oral health conditions and infantile growth in preschool children. The targets of this article were children aged 4-6 years living in Borebi, SP, Brazil. During the visits to these children, the following activities were performed: oral examination, using oral mirror and periodontal probe (WHO 1997); socioeconomic evaluation of the families using a questionnaire answered by parents/guardians; anthropometric measures were taken (height was measured with a tape measure in millimeters and weight was determined with a digital weighing-machine accurate to 100 g). 75 children were examined of which 46.67% were female and 53.33% were male; 92% attended preventive programs; 50.67% were caries free and the DMF-T index was 1.83. No statistically significant association was observed between the socioeconomic level, infantile growth and dental caries. There was statistically significant negative correlation (p<0.05) between height/age index and DMF-T index, denoting that the more favorable the child growth, the better the oral health conditions. However, it is important to highlight that 92% of the children attend preventive programs in their programs and that the city has 100% of coverage of the Government’s Family Health Program, with important repercussions on infantile health situation.

Epidemiology of dental caries in adolescence: influence of primary attention Oliveira, M.F.S.; Silvério, M.A.; Lauris, J.R.P.; Tomita, N.E.

Many variables have been associated with the occurrence and distribution of dental caries. The objective of this study was to evaluate the influence of the socioeconomic variable on oral conditions and growth in adolescents aged 11, 12 and 13 years in the city of Borebi, SP. The development of oral health actions in the primary attention level and their repercussion on dental caries prevalence was also verified. The adolescent growth (height and weight measures) and its association with dental caries were also evaluated. Home visits were done and, after granting parental consent, a socioeconomic questionnaire was applied as well as oral examination and anthropometric measures of the adolescents were done. 108 adolescents were examined and a mean DMF-T = 2.09 was obtained. Statistically significant associations between family income and adolescent anthropometric measures were found (p<0.05). 21 examined adolescents were caries-free and 24 of them presented DMF-T = 1, this was the most frequent index recorded. 40% of the visited families had a mean monthly income between 1 or 2 minimum salaries. These findings demonstrate the effectiveness of the primary attention to oral health, as most of adolescents presented low DMF-T, even those belonging to families with low socioeconomic conditions. Maximum DMF-T found was 8, in only 3 adolescents; however they had recently moved to the city and were not attending any preventive programs before. It is important to highlight that 98.15% of the examined adolescents attended preventive programs in their schools and that the city has 100% of coverage of the Government’s Family Health Program, with important repercussions on the adolescents’ view of health.

Influence of primary attention and infantile growth on dental caries in preschool children from Borebi, SP Silvério, M.A.; Oliveira, M.F.S.; Lauris, J.R.P.; Tomita, N.E.

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