Influence of feldspathic ceramic shade and cement photopolymerization period on microhardness of dual resin cement.

Maximo, R.O.; Santana, F.R.; Silva, N.; Carlo, H.L.; Fonseca, R.B.; Soares, C.J.

The feldspathic ceramic shade and photopolymerization period of the cement, when associated, can alter the hardness of the resin cement. The aim of this study was to evaluate the influence of the photopolymerization period and feldspathic ceramic shade on the microhardness of dual resin cement. One hundred bovine incisors were selected for this study. Their roots were cut and their crowns were embedded in polyvinyl ether resin. Next, they were randomly divided into 20 groups (5 = 5). Standardized cavities (4.0 mm in diameter and 1.0 mm in depth) were prepared on the buccal surfaces. Ceramic restorations (Noritake Ex 3) (4mm in diameter and 4mm thickness) were fabricated in shades A1, A2, A3, A3.5 and A4. A dual resin cement (Relay X-ARC) was inserted into each prepared cavity and a mylar strip was positioned over it. The ceramic pastille was coupled to a perforated metal device and positioned between the cement and the light source, and was light cured for 40, 80, 120 and 160s. Vickers hardness test was performed on the cement layer, with a 50g load application for 30s, making 5 indentations per specimen. Two-way ANOVA (4x5) and Tukey’s test (4x 0.05) showed difference for the factors photopolymerization period and shade. The results (in MPa) were: A140 (18.1 ± 1.4a); A180 (20.8 ± 1.9a); A1120 (21.0 ± 1.1a); A1160 (22.4 ± 2.3a); A240 (15.3 ± 3.8a); A280 (19.4 ± 1.0a); A2120 (20.1 ± 1.4a); A2160 (21.4 ± 1.7a); A340 (11.9 ± 2.2a); A380 (13.8 ± 0.8a); A3120 (19.4 ± 1.7a); A3160 (20.3 ± 4.5a); A3540 (9.1 ± 2.2a); A3580 (8.9 ± 1.9a); A35120 (18.7 ± 2.1a); A35160 (19.2 ± 3.3a); A4404 (6.5 ± 1.4a); A460 (15.7 ± 2.4a); A4120 (17.4 ± 1.1a); A4160 (19.7 ± 2.8a). The increase in feldspathic ceramic shade saturation decreased the hardness when polymerized for 40s. The increase in polymerization time to 120 and 160s decreased the influence of ceramic shade saturation on cement hardness.

Oral Diagnosis

Study about oral health of elderly people resident in the “São Francisco de Assis Home”

Oliveira, A.C.M.; Montandon, A.F.B.; Oliveira, M.P.; Massacato, E.M.S.

The increase of the Brazilian elderly population has placed in evidence physiological processes of this age range, adding resources to minimize or delay undesired alterations. The aim of this study was to evaluate the oral conditions of 76 aged residents of the “São Francisco de Assis Home” of the city of Araçatuba. The patients were examined at the asylum facility and data from clinical interview and oral examination were collected. Most patients were female (61.8%) and the mean age was 76 years. Regarding systemic alterations, 92.4% of the aged presented some kind of health problem, being mostly cardiovascular alterations (43.3%) and psychiatric/neurological disorders (28.9%). With respect to medications, the most used were antihypertensive and psychiatric drugs (28.1% and 24.0%, respectively). Regarding oral hygiene, 34.7% reported to clean the mouth three times a day, but most patients presented bad oral hygiene and removable dentures in poor cleaning conditions. Also, injuries and/or alterations in the oral mucosa were evaluated, the most prevalent were cleft lip and palate, the occurrence of dental anomalies is higher than in normal children. The objective of this study is to report a case of migration of tooth 35 in a patient undergoing routine dental care reported the development of an unusual lesion on the left thumb. The nail presented an uneven surface, with reduced thickness, a pitted appearance and a white or yellowish discoloration. Radiographs and one periapical radiograph that were taken during the patient’s treatment between 1978 and 2002, and available at the filing service of the Department of Dental Radiology of HRCA-USP. It may be concluded that the distal migration of the left mandibular second premolar (tooth 35) when associated with the presence of cleft lip and palate is a quite rare condition because, as far as it could be ascertained, there are no similar cases previously reported in the literature, but it occurred in a similar way in individuals without cleft lip and palate.

An atypical lesion caused by onychophagia


Oncychophagia is defined as the habit of biting the nails. It is a nervous, repetitive, embarrassing, socially undesirable habit that can be found in 6-60% of the world population. The aim of this study is to describe an atypical lesion associated with onychophagia and to present a brief literature review on this habit. An adult male patient undergoing routine dental care reported the development of an unusual lesion on the left thumb. The nail presented an uneven surface, with reduced thickness, a depression over the lunula and a visible pterygium underneath the lesion. The patient reported exacerbation of his parafunctional habits, it was clear the existence of an association between these habits and the lesion. A counseling approach was planned in order to instruct the patient to avoid biting the nails and removing the surrounding epithelium. After two months, the lesion had disappeared secondary to nail growth. It could be observed how important the dentist could be on detection of onychophagia and referral to the patients to the most appropriate treatment.

Cone bean technology

Mørø, B.M.; Azevedo, B.C.; Azevedo, J.R.; Capelozza, A.L.A.

Conventional x-ray imaging is essential to settle a diagnosis of maxillary diseases. The limitations in the interpretation of the images are mainly due to the formation of a two-dimensional image of three-dimensional structures. Recently introduced to the market, the Cone Beam technology allows 3D facial image acquisition and reconstruction. This technological advance contributes significantly to the study of patients who need facial reconstructions or dental implants, and to the more accurate identification of the diseases that affect the bone and dental structures. The attainment of 3D images still allows the reconstruction of the cleft lip and palate, it can assist in the surgical planning, but also reduces the surgical time considerably. Image production, indications, advantages and cost of this new technology are addressed in this work.
Keratoacanthoma and squamous cell carcinoma: differential diagnosis
Boos, F.B.D.J.; Iwaki, L.C.V.; Souza, L.R.K.; Ghizzi, V.C.; Misawa, M.Y.O.; Farah, G.J.

The keratoacanthoma denomination was firstly used by Roos, Winsten (1950), describing the clinical and histological course of the lesion. Historically, this entity has been included as synonymous of self-healing squamous cell carcinoma, sebaceous molluscum and pseudocarcinomatous molluscum. It is defined as a benign epithelial neoplasm, originated from the superficial portion of the sebaceous gland of the hair follicle. Clinically, it presents as an exophytic nodule, central keratin-filled crater, normally not exceeding 1.5 cm in diameter, firm, covered by rapid-growth normal epithelium. In the lower lip, a differential diagnosis should be undertaken with squamous cell carcinoma because this is an area of high prevalence of this pathology and the keratoacanthoma resembles very much clinically and histopathologically the squamous cell carcinoma. Treatment of keratoacanthoma requires excisional or deep incisional biopsy, with the inclusion of the clinically normal adjacent epithelium in order to obtain an accurate histopathologic interpretation. As a treatment approach, surgical excision presents better aesthetic results compared to a possible spontaneous remission. The aim of this work is to report the case of a patient who presented with a well-circumscribed solitary nodule, located in the lower lip, where an incisional biopsy was carried out. After the histopathology diagnosis, complete removal of the lesion was performed. The etiology, clinical and histological characteristics, the differential diagnosis from the squamous cell carcinoma, and the possible treatment options are discussed.

Identifying and correcting errors in periapical x-rays

The correct radiographic interpretation of the structures that surround the teeth and bone in the jawbone and jaw and of the pathologies that occur in this region, allows the dentist to make a more accurate diagnostic elaboration. Radiographic errors of prescription, technique and processing make this interpretation difficult or even impracticable. Currently, the use of film holders for periapical and interproximal radiographic techniques minimizes errors of image elongation and shortening. However, errors in the exposure and processing of periapical films are still frequent. The objective of this work was to use exposed radiographic films with errors to assist undergraduate students and dentists in the identification and correction of errors of periapical radiographic technique and processing. These errors, when not solved, impair image interpretation and diagnosis of the disease, resulting in unnecessary exposure of the patient to radiation. All procedures to be discussed are in accordance with the guidelines established in the Regulation nº 453 of the Ministry of Health, issued in June 1998.

Adenoid cystic carcinoma of the palate: a case report.
Freitas, P.; Consolaro, A.; Gurgel, C.N.C.; Lara, V.S.

A 63-year-old white female presented to the clinic with the chief complaint of a “non-healing wound on the palate” with 1-year history and periods of pain and bleeding. On intraoral examination, an ulcer with elevated borders was observed on the palate, presenting approximately 2.5 cm in diameter. An incisional biopsy was performed and the lesion was sent to histopathological examination at the Oral Pathology Laboratory. The microscopic analysis revealed nests and cords of basoid hyperchromatic epithelial and myoepithelial cells, either forming a solid pattern, a cribriform pattern with microcystic spaces or tubular pattern with ductiform structures. Mild perineural invasion was observed and the cystic and ductiform spaces were filled with mucoid material. Based on the microscopic features, the diagnosis of adenoid cystic carcinoma was settled, and the patient was referred to an oncologist. Adenoid cystic carcinoma is one of the most common malignant salivary gland tumors and, when it affects the minor salivary glands, the palate is the most frequent location. Clinically, it presents as a painless, slow-growth mass, exhibiting a flat or ulcerated surface. Microscopically, it is characterized by ductal and myoepithelial cells arranged in three defined patterns: cribriform, tubular and solid, and these patterns can be associated. Perineural invasion is a characteristic microscopic feature of this lesion. The treatment of choice is radical surgery combined with radiotherapy. It has a trend towards tissue alterations deriving from excessive exposure to the sun, in order to prevent the onset and/or progression of lesions with potential of malignant transformation.

Infected fibro-osseous lesion: case report
Moïno, A.L.U.; Araújo, M.L.; Rodrigues, M.T.V.; Sant’Ana, E.; Consolaro, A.; Damante, J.H.

A 31-year-old white female reported pain and infection on the maxilla for 2 months. On oral exam, the left maxilla, area near the left canine, presented an asymptomatic swelling and retention of deciduous left canine were verified detected. The time evolution was 6 months. A vestibular fistula and suppuration were observed. Panoramic, periapical and occlusal radiographs disclosed a great radiolucent area intermingled with irregular radiopacities extending from the left lateral incisor to the left second premolar and a slight migration of the root of the maxillary left lateral incisor. The left canine was displaced superiorly at a horizontal position, transversely in a buccopalatal direction and involved into the mass. Computed tomography (CT) highlighted the relations of the lesion with the nasal and oral cavities. The continuity with the adjacent bone with no precise limits was well demonstrated by the CT scan. The patient was submitted to surgical removal under general anesthesia and the microscopic examination of the piece revealed osseous areas with cemento-like formations associated with intense cell proliferation, and highly sclerosed cementoossifying material. There was also normal bone, inflammation and biofilms, which led to the diagnosis of an infected fibro-osseous lesion. After 1 year of follow up, the patient is in general good conditions.

Dentigerous cyst associated with the development of complex odontoma: case report
Ghizzi, V.C.; Ferreira, G.M.; Filho, L.I.; Iwaki, L.C.V.

The odontoma is an odontogenic tumor in which there is a complete differentiation of the cells, reaching enamel, dentin and a variable amount of cementum and pulp. The odontoma is involved by a fibrous capsule that may occasionally develop a dentigerous cyst, which seems to originate from the enamel, being generally asymptomatic and slow-growth lesion. Hirshberg et al. (1994) reported the association of odontoma and odontogenic cyst in 24% of the studied cases, which demonstrate that this is an unusual lesion that should have an accurate diagnosis. A 28-year-old Caucasian female patient was treated under complaint of pain in the “roof of the mouth” upon drinking of cold beverages. The extracutal physical exam revealed an asymptomatic swelling at the region of the canine fossa. The intraoral examination revealed that the swollen area was hardened on the buccal surface of tooth 13 and that there was a dome-shaped volumetric increase on the palatal side. A panoramic radiograph suggested a cystic lesion in the right maxilla with root resorption on the teeth 11 and 12. Inside the wound there were two circular radiopaque images. Fine-needle aspiration biopsy presented a yellow-citrine liquid characteristic of a cystic lesion. Initially, teeth 11 and 12 were endodontically treated, followed by surgical enucleation of the lesion, which made evident the intimate relation of the radiopaque masses with the lesion wall, obtaining two hard tissue fragments and one of soft tissue sample. The microscopic examination confirmed the diagnostic hypothesis of dentigerous cyst associated with the odontoma. The clinical and radiographic controls at 3, 6 and 12 months postoperatively suggest effective progressive mucous and bone healing of the surgical wound. Patient goes on with no complaints and with remission of signs and symptoms.

Prevalence of actinic cheilitis in an oral health campaign in the city of Campinas, SP
Zanetti, R.; Flório, F.M.; Moraes, P.C.; Lima, Y.B.A.; França, F.M.G.; Araújo, V.C.

The chronic or excessive exposure to solar radiation can result in a pre-malignant tissue alteration characterized by a diffuse lesion on the vermilion of the lower lip known as actinic cheilitis (AC). The aim of this study was to evaluate the prevalence of actinic cheilitis during an oral health campaign in the city of Campinas, SP, in the first semester of 2005. 420 individuals were examined (215 females and 205 males) with mean age of 47.1 years (±15.4). After filling out a specific questionnaire arguing about their socioeconomic and demographic data, type of access to dental services and self perception in oral health, the volunteers underwent clinical and epidemiological examinations by previously trained and calibrated examiners, the activity being completed with educative lectures regarding oral self examination and care with respect to solar exposures. The prevalence of AC was 18.1% (n=76), with predominance in the male population (69.7%) among individuals that classified themselves as Caucasian (73.7%) and individuals aged 45-60 years (40.8%). Among the volunteers with AC, 46.1% reported being exposed to the sun during the week (3.4 days/week. 4.9h=3.9 hours/day). 36.8% were exposed during leisure (1.6 day/week; 1.3±2.0 hours/day) and 28.6% during sport activities (1 day/week; 0.6±1.4 hour/ day). In conclusion, preventive strategies in adult patients must also be directed towards tissue alterations deriving from excessive exposure to the sun, in order to prevent the onset and/or progression of lesions with potential of malignant transformation.
Scintillography as an auxiliary diagnostic method in dentistry

Touzon, B.; Gonçalves, P.Z.; Buller, I.F.R.; Capelozza, A.L.A.

This study aimed to address the main indications of scintillography as an image diagnostic method in dentistry, its advantages and disadvantages. This examination receives this name due to the use radioactive composites (isotopes) connected to different pharmacologic substances, such as, polyphosphates, pyrophosphates or diphosphates, labeled by 99m-tecnecio. Using low amount of emitted radiation, this method evaluates the absorption, distribution and concentration of these isotopes, which participate in the metabolism of the specific tissues and organs. After the impact of radioactive iodine in the treatment of some thyroid gland diseases in the 50’s, the scintillography became indispensable for the settlement of diagnoses for the thyroid gland. Because it is a high-sensitivity exam for detection of some early stage diseases at a lower cost, which allows a rapid and single-session evaluation of the whole skeleton, bone scintillography has attracted the attention of professionals of different health fields. The greater the blood concentration in the region, the greater the drug concentration. However, it must be considered that the scintillography exam is nonspecific, and any changes on bone formation may result in abnormal radiostotope placements. In dentistry, the scintillography exam may be used on cases of suspected metastasis, early diagnosis of oral and maxillofacial complex diseases, fractures, arthritis, osteomyelitis, Paget disease, fibrotic dysplasias, hemangiomas, pseudo-arthrloses, osteoradionecrosis and traumatic bone cyst. The image is obtained because the administered radio-medicines concentrate in the bone and consequently, with the capacity of the osteoblastic activity of the desired region, thus demonstrating the new bone formation. The scintillography can also be useful in the diagnosis of condylar hyperplasia and the determination of salivary gland size, localization and function.

Periapical inflammatory cyst associated with a primary tooth: case report.

Mori, A.A.; Strosi, J.P.; Marques, L.M.; Farah, G.J.; Iwaki, L.C.V.; Filho, L.I.

Periapical inflammatory cyst is also known as apical pericoronal cyst, radicular cyst or apical cyst. It is an odontogenic cyst whose development is directly related to inflammatory processes that can stimulate the proliferation of epithelial cells that will in turn trigger the formation of these pathologies. These epithelial sources usually originate from the epithelial rests of Malassez, but they may also be related to the crevicular epithelium, sinusial lining or epithelial lining of fistulous routes. Clinically, this cyst is usually asymptomatic. However, occasionally, swelling and mobility or displacement of the adjacent teeth may be observed. Radiographically, it presents as a well-defined radiolucent area with linear contour, circumscribed by bone scintillographic exam is nonspecific, and any changes on bone formation may result in abnormal radiostotope placements. In dentistry, the scintillography exam may be used on cases of suspected metastasis, early diagnosis of oral and maxillofacial complex diseases, fractures, arthritis, osteomyelitis, Paget disease, fibrotic dysplasias, hemangiomas, pseudo-arthrloses, osteoradionecrosis and traumatic bone cyst. The image is obtained because the administered radio-medicines concentrate in the bone and consequently, with the capacity of the osteoblastic activity of the desired region, thus demonstrating the new bone formation. The scintillography can also be useful in the diagnosis of condylar hyperplasia and the determination of salivary gland size, localization and function.

White lesions of oral mucosa: case report and differential diagnosis

Mandallí, A.C.; Sampieri, M.B.; Rodrigues, M.T.V.; Damante, J.H.; Junior, O.F.

The white lesions of oral mucosa are a complex group of lesions characterized by presence of stains or white plates whose differential diagnosis depends on a detailed clinical and radiographic examination (anamnesis and physical examination) and, in some cases, a biopsy is necessary. This case refers to a 45-year-old Caucasian patient who was referred to the Oral Diagnosis Clinic of FOB/USP for evaluation of white plaques on his oral mucosa. The plaques were present on both sides of the retromolar and jugal areas and were asymptomatic. The patient was smoker and used a mandibular removable partial prosthesis. The diagnosis was lichenoid and the patient has been periodically followed up.

Gorlin-Goltz syndrome: diagnosis and 4-year follow up in a 6-year-old child

Silva, M.A.M.; Munhoz, E.A.; Sant’Ana, E.; Consolaro, A.; Júnior, O.F.

A 6-year-old female patient was referred to our service due to a tumefaction in the left mandible that was hard to palpation. Radiographically, two radiolucent areas, divided by a bone septum and measuring approximately 3 cm each were observed, displacing the germs of the permanent teeth. Incisional biopsies in the two lesions were performed and a diagnosis of odontogenic keratocyst was reached. Due to the appearance of the odontogenic keratocyst at an early age and to the existence of clinical features, such as presence of numerous nerves, frontal boss, hypertelorism and mandible prognathism, there was suspicion of Gorlin-Goltz Syndrome. This syndrome, also known as nevoid basal cell carcinoma, is characterized by multiple odontogenic keratocysts, nevoid basal cell carcinoma, hypertelorism, palmoplantar and skeletal alterations, such as bifid rib, scoliosis, vertebral fusion, frontal boss and temporoparietal and mandibular prognathism. The patient was referred to the dermatologist and, after evaluation, vertebral anomalies were found in T3 and T4. After 4 years of observation, the patient developed 3 other odontogenic keratocysts that appeared in the posterior region of the right maxilla involving the germ of tooth 27 and 28, in the periperal region of the mandibular incisors and in the posterior region of the left maxilla involving the germs of teeth 27 and 28. This work presents the characteristics of Gorlin-Goltz syndrome as well as its evolution and treatments carried out throughout the 4 years of surveillance.

Osteonecrosis of the jaws related to bisphosphonate therapy

Romanowski, M.; Strujsk, G.; Gomes, K.; Drechner, M.; Carlini J.L.

Bisphosphonates are drugs broadly used in the treatment of patients with osteoporosis, Paget’s disease and metastatic bone disease, especially from breast cancer, prostate cancer and multiple myeloma. After its chronic use, it has been observed osteonecrosis in the jaws, together with bacterial infection and bone exposure. Treatment according to literature includes expectation, use of antibiotics and debridement of the infected area. However, none of these treatments have shown suitable results. A consensus among experts states that prevention, preceded of proper interview and primary identification of clinical or radiographic alterations are the best procedures for a better prognosis. A 71-year-old man who was diagnosed with prostate cancer 2 years before and metastatic disease 2 months after total prostatectomy received Zometa/4mg (Zolendronic acid) for 16 months. He presented with pain, chewing difficulty and bad taste when swallowing. In addition, he presented with regions of exposed necrotic bone in the mandible measuring 2cm in the left side and 3cm in the right side. Treatment included antibiotic therapy for acute infection management, chlorhexidine mouthwashes, curettage and removal of exposed bone areas that were in contact with oral cavity. A jelly haemostatic sponge was used for isolating the lesion from the oral cavity, with the intention of improving chewing and healing of the external mucosa. The patient referred improvement of the pain, chewing and taste after 3 months. He is still under treatment without cure prevision. Antibiotics are still given for prevention of acute infections and new bone exposure areas are being extracted.

Pemphigoid: diagnosis and treatment

Oliveira, R.B.S.; Araújo, M.R.; Albaqueque, D.F.; Consolaro, A.; Damante, J.H.

Pemphigoid is an autoimmune disease characterized by the development of vesicle-bullous lesions on the skin and mucosal surface. Patients develop antibodies directed against one or more components of the basal membrane, resulting in the formation of subepithelial blisters. The term pemphigoid is used because of its clinical similarity to pemphigus, although the microscopic characteristics and prognosis are different. Initially, it involves the mucosal surface, while skin involvement is rare. In some areas, the ulcerated lesions may result in scar formation. Oral mucosa is affected in many cases and the gingiva is the main site of occurrence, followed by the eyes. The development is slow and the lesions appear several months before the diagnosis is established by biopsy and immunofluorescence. This study intends to review concepts and present two cases that are currently being followed up, aiming the diagnosis of the lesion.

Maxillary central giant cell lesion: Intralesional corticosteroids and bone plastic surgery treatment

Nápoles, B.B.; Capelozza, A.L.A.; Sant’Ana, E.; Consolaro, A.; Damante, J.H.; Zanda, M.J.

Central giant cell lesion is also called as giant cell tumor or giant cell granuloma, but it is not a tumoral lesion. In spite of its neoplasia-like locally aggressive pattern, it is considered as a nonneoplastic lesion. Its etiology is related to an exacerbated response to trauma. The histopathological features are multinucleated giant cells. Because of its locally aggressive behavior, the correct diagnosis is essential and the treatment of choice is surgery, usually including curettage. However, this procedure causes great morbidity to the patient. Another treatment option is an intralesional injection of corticosteroids followed by a bone plastic surgery. A 12-year-old white female presented with an exophytic expanisible lesion on the anterior maxilla that caused divergence of the long axis of the central incisors, had 2-month evolution and was secondary to trauma. Oral, radiographic and histological examination revealed a central giant cell lesion. A laboratory investigation of parathyroid hormone excluded the possibility of a
brown tumor of hyperparathyroidism. The treatment protocol was intralobular injection of triamcinolone acetonide (20 mg diluted in anesthetic at 1:1 ratio), using 1 mL of the solution for each 1 cm³ of the lesion, and totalizing 6 weekly applications. Clinical-radiographic follow up was performed. After 3 months, the regression of the lesion was observed and a bone plastic surgery was performed to reestablish the esthetics of the affected area. This treatment protocol was deemed as satisfactory because it permitted lesion remission, causing less morbidity, avoiding the extension of the involved and great resection of the maxilla.

Peripheral ameloblastoma with two recurrences

Brener, S.; Leal, R.M.; Assis, E.M.; Souza, F.E.M.; Oliveira, D.O.

A 79-year-old, white male denture wearer went to the Oral Diagnosis Clinic of FOPUC-MG with a well-circumscribed nodule on the right mandible measuring 1.5 x 2 cm of diameter, with smooth surface, normal color and painless symptomatology during mastication. The clinical diagnosis was fibroic hyperplasia with indication of a conservative excisional biopsy. The microscopic diagnosis was peripheral ameloblastoma. The patient returned 15 days later presenting a local volume increase, suggestive of denture trauma. Nine months later, a lesion with the same characteristics as that observed at the first clinical visit was detected. Periapical, panoramic and occlusal radiographs were taken. The periapical image showed little erosion in the superficial bone. A new surgery was scheduled with safety margins of 5 mm and removal of periosteal tissue underneath the lesion. Denture grinding was done to reduce the local trauma. The follow up visits were performed 2 and 16 months after the surgery, with no evidence of clinical or radiographic lesion recurrence.

Dentist-patient relationship against infectious-contagious diseases

Faleiros, P.L.; Aranega, A.M.; Silva, P.I.S.; Marlos, H.F.; Fattah, C.M.R.Z.

Dentist-patient relationship against infectious-contagious diseases has been object of several investigations in different countries. Studies published in the late 1980’s revealed that most dentists were concerned in treating HIV+ patients. Most recent studies have shown that the willingness in assisting these individuals has increased, indicating a clearer understanding of the dentist’s role in the care of infectious-contagious diseases. However, in the Brazilian literature, few studies are based on the report of patients with these pathologies, approaching their experience with respect to the dental care. The major goal of this work was to evaluate, by the application of 209 questionnaires to individuals with infectious-contagious diseases, the behavior of dentists during the dental treatment. As much as 35% of the interviewees did not seek dental care after being diagnosed with the disease. From those who reported their disease to the dentist, 3% were not treated. Among the treated ones, 16% were assisted at public institutions, 18.5% in public institutions specialized in treating patients with infectious-contagious diseases, 30.5% in private clinics; 17% revealed the diagnosis to the dentist. 12% of the respondents believed that there was some special care regarding the use of protective barriers by the dental staff and only 5% judged to have suffered discrimination. From the patients that did seek dental care, 5% answered that they would not inform the diagnosis in the event of undergoing a future dental treatment. Based on the collected data, it may be concluded that, according to the patients’ perception, the dentist use different protective barriers during the treatment of individuals with known infectious-contagious diseases. Although the reported discrimination rate was low, the fear of prejudice persists, which was demonstrated by the great patient refusal to inform the dentists of their condition of having an infectious-contagious diseases.

Dermoid cyst of the buccal floor: a case report

Gomes, R.S.; Ferreira, G.M.; Farah, G.J.; Silva, M.Z.M.; Pires, L.C.; Vinci, F.C.; Daniel, A.N.

The dermoid cysts are considered uncommon developmental malformations. They are limited by epidermis-like epithelium containing dermal structures attached to the cystic wall. Their most common location in the midline of the buccal floor, but they may also be found laterally to the midline or in other areas, such as the submandibular region. They can be found below or above the geniohyoid muscle. The cysts located above of the geniohyoid muscle may cause submental swelling giving a “double chin” appearance. Clinically, they can vary, in size, from some millimeters to centimeters, presenting as a painless, slow-growth mass with consistency similar to that of “rubber or dough”. For diagnosis and settlement of the treatment plan, generally, clinical characteristics and imaging exams, such as computed tomography (TC) and magnetic resonance imaging (MRI) are associated, which are important methods for lesion evaluation. However, in most cases, the definitive diagnosis is obtained by histopathological examination. The objective of this work is report a case of a 41-year-old melanoderma female patient who was admitted to the Metropolitan Hospital of Sarandi/PR presenting a painless swelling in the sublingual region. The patient was submitted to enucleation of the lesion under general anesthesia and the macroscopic piece was sent to histopathological examination with the hypotheses of dermoid cyst, branchial cyst or plunging ranula. The hypothesis of dermoid cyst was confirmed.

Panoramic radiography: acquisition, interpretation and errors

Imada, T.S.N.; Teixeira, R.C.; Albuquerque, D.F.; Aranega, A.M.; Pereira, F.P.; Miyahara, G.I.; Criveline, M.M.; Got, A.; Demathé, A.

Panoramic radiography is the most common complementary exam used at the dental office. Good quality radiology allows the dentist a better interpretation and greater support on the diagnosis of the jaw’s pathologies, improving treatment efficacy. This study aims to discuss the most frequent errors in panoramic radiography, suggesting how to avoid them. There are four basic requirements to obtain good quality radiography: maximum detail, minimum distortion, appropriate density and contrast. Detail is the capacity of reproduction of the exposed object. Unsharpened images occur when there is a movement either from the machine, the film or the patient during the exposure. Density is related to the size of the focal area, film sensitivity and processing. Distortion is directly related to the enlargement or reduction of the exposed object and interferes with the interpretation of the image. Radiographs should have a medium density. Contrast is characterized by the difference between white and black, going through the shades of gray, considering the medium contrast where it is observed greater scale in shades of gray. Thus, dentists should obtain great detail radiography, low distortion, medium density and contrast in order to establish a correct diagnosis.

Periodontal lateral cyst in an adolescent patient: diagnosis and treatment

Santos, M.R.; Pereira, F.P.; Miyahara, G.I.; Criveline, M.M.; Demathé, A.

Paradental cyst is a rare non-keratinized developmental odontogenic cyst that occurs adjacent or lateral to a vital tooth root. It is found mainly in adults (5th to 7th decades). In 75% to 80% of the cases, it occurs associated with the lateral incisor, canine and lower premolar. It can present painful or non-painful symptoms. Most recent studies have shown that the willingness in assisting these individuals has increased, indicating a clearer understanding of the dentist’s role in the care of infectious-contagious diseases. Although the reported discrimination rate was low, the fear of prejudice persists, which was demonstrated by the great patient refusal to inform the dentists of their condition of having an infectious-contagious diseases.

Neurofibroma in a child: case report

Joaquim, R.C.; Demathé, A.; Pereira, F.P.

Neurofibroma is the most common neoplasm of peripheral nerves derived from an admixture of Schwann cells and perineural fibroblast proliferations. Solitary tumors are more common in young adults and they present as asymptomatic slow-growth soft tissue lesions, which vary greatly in size from tiny nodules to large masses. This work presents a case of a 4-year-old patient referred to the Department of Surgery of the Dental School of Araçatuba/UNESP due to a periodontal abnormality detected in a radiographic exam for further orthodontic treatment. During intraoral exam, an abnormality was observed in the crown of tooth 45. Radiographically, it was observed a circumscribed radioluculent area between teeth 45 and 46 with 5 mm in the largest diameter. Pulp vitality test of teeth 45 and 46 was positive. After pathological examination of the buccal lesion, Histological features added to clinical characteristics allowed the definitive diagnosis of neurofibroma cyst. Follow-up is being conducted and the beginning of bone repair was observed in the area 1 month after lesion excision. This work presented the diagnosis and treatment of neurofibroma cyst in an adolescent patient.
Correlation between tumor-associated tissue eosinophilia and clinical staging of oral squamous cell carcinoma

Assao, A.; Tijoe, K.C.; Faustino, S.E.S.; Kovalski, L.P.; Moraes, R.V.; Oliveira, D.T.

The presence of eosinophils in oral squamous cell carcinoma (SCC) has been observed in cases of extensive muscular infiltration. The aim of this study was to verify whether there is any relation between the presence of eosinophils and the process of stromal invasion in malignant tumors. A total of 43 patients treated for oral verrucous carcinoma or well-differentiated SCC, with or without lymph node involvement, at the Head and Neck Surgery and Otorhinolaryngology Department of the Cancer Hospital A.C. Camargo (Fundação Antonio Prudente, São Paulo, Brazil) from 1980 to 2000 were examined. The eosinophils were quantified in a x400 field using a camera connected to a computer with an image-analysis software. Tumor-associated tissue eosinophilia was classified according to intensity as absent/mild (<175 eosinophils/mm²) and intense (>175 eosinophils/mm²) and it was statistically correlated with its microscopic features and clinical data by Fischer’s exact test. Most SCC with III and IV TNM stages (72%) presented intense tissue eosinophilia while absent/mild tissue eosinophilia was frequently detected in SCC with I and II TNM stages (p=0.024). These findings suggest that the presence of an intense tissue eosinophilia in SCC seems to be associated with the clinical tumor outcome characterized by extensive muscular infiltration and tissue destruction.

Knowledge of dental students of Unifal-MG of the consequences and complications of the oral piercing use


The aim of the present study was to characterize the population of dental students at the Federal University of Alfenas (Unifal-MG) that use body piercing and evaluate the knowledge of these future health professionals of the complications caused by body piercing use, especially in the mouth. Three hundred and sixty six dental students were enrolled in this study. The students answered a survey with questions about their demographics (age, gender, race, etc), information about the use of body piercing, including local of use and for how long they used the piercing, and questions about the willing to use it. Knowledge of the pathologies and problems related to the use of body piercing was also investigated. The statistical correlations between the demographic information and the specific variables described above were obtained by the chi-square test with level of significance of 5%. The results demonstrated a sample constituted mainly of women (58.2%), Caucasians (83.5%) and 15-25-year-old age range (75.1%). Most interviewees reported to be heterosexual (97.8%) and catholic (99.7%). The prevalence of piercing users’ among the undergraduate students was 33.1%. The female students were found to practice more body piercing than the male students, this difference being statistically significant (p<0.001). Generally, the students that use body piercing have a higher level of knowledge about the possible complications related to its use than those students that do not use it. The problems related to the use of body piercing can be of local, systemic or even social nature. Therefore, health professionals have to know the risks and consequences of body piercing and inform the population about them, as well as be aware of the possible harms deriving from body piercing.

Sialolithiasis caused by sialolithiasis: a case report


Sialolithiasis is one of the most frequent pathologies of the salivary glands, involving both major and minor glands, but especially the ductal system of the submandibular gland. Mucocele and ranula (specifically located in the floor of the mouth), are mucous extravasation phenomena that affect salivary glands due to malformation or rupture of gland ducts, changing the normal salivary flow and leading to its deposit in the adjacent tissues. The two main causes for the appearance of ranula are the trauma and the obstruction of gland ducts for the sialolith formation. The purpose of this case report is to address the importance of an accurate diagnosis and immediate treatment when sialithyris is found.

Epidemiology, diagnosis and treatment of lichen planus in the “Buccal Lesions Project” developed at the State University of Maringá

Ido, V.Y.; Silva, M.C.; Pleralsi, N.; Silgueiro, R.S.; Pires, L.C.; Iwaki, L.C.V.

Lichen planus is a chronic mucocutaneous disease of unknown etiology. Starting from a literature review, the purpose of this work was to evaluate the clinical aspects of the lichen planus, as well as to compare these findings with literature reports. 26 clinical records from the archives of the “Epidemiology, Diagnosis and Treatment of Buccal Lesions” extension project, of the Department of Dentistry of the State University of Maringá (PR, Brazil) between 1995 and 2005 were consulted and reviewed. The data were controlled and analyzed. Ultimately, they led to the
Conscious sedation with nitrous oxide and oxygen has increased among skilled professionals throughout the country due to its easy use, rapid effect, and safety for patients. Conscious sedation with nitrous oxide and oxygen has little effect on the cardiovascular and respiratory systems, allowing the patient to perform any activity immediately after the treatment. The nitrous oxide has little effect on the cardiovascular and respiratory systems, allowing the patient to perform any activity immediately after the treatment.

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Conscious sedation with nitrous oxide and oxygen basically aims to reduce the anxiety of the patient, thus increasing his/her pain threshold. It is a state of depression induced with nitrous oxide and oxygen that will aid the forensic dentist to complete the cases with satisfactory information. Identification can be done by conventional, panoramic and digitalized radiographs. In human identification, radiographs from the skull, face or teeth can help estimating the age of children and adults. Post-mortem radiographs may reveal evidences of ante-mortem dental treatments that will help in human identification. The work of the forensic dentist becomes easier when a good documentation, especially complete dental radiological documentation, is available.

Eagle’s syndrome: a report of one case treated with intraoral approach

Strujak, G.; Romanowski, M.; Gomes, K.U.; Biron, C.; Gebert, A.O.; Carlín, J.L.

In 1937, Eagle described some cases of pharyngeal and cervical facial pain caused by elongation of the styloid process (more than 25mm) or calcification of its ligaments. He believed that 4% of the population had the process elongated, and 4% of these patients had symptoms. The symptoms of this condition are vague pharyngeal pain, cervical facial pain, foreign body sensation in the pharynx, dysphasia, pain on head movements, irradiated pain on the temporomandibular joint and superior limb, earache, headache and vertigo. The variations of these symptoms are attributed to the variations of styloid process length and position, made by adjacent tissues fibrosis for infection, fracture or surgery in the styloid process region. Diagnosis may be difficult with symptom variation. The purpose of this work is present the case of a 39-year-old female patient, who came to our service complaining of pain on the tonsil fossa, on the head movements, on swallow and on opening the mouth, this symptoms irradiated to the ear region, and foreign body sensation on the pharynx. The processes are seen on the panoramic radiograph at both sides. Tenderness to palpation was elicited bilaterally in the tonsil fossa. Stylohyoidectomy was made bilaterally with an intraoral approach. After surgery, the patient had breath complications, needed medication and mechanical ventilation. Seven days later, the patient shown limitation on mouth opening, pain on swallowing and was asked to go to an otolaryngologist because of nose refluxing. Within 30 days, there was an improvement on mouth opening and pain variation.

Conscious sedation with nitrous oxide


Conscious sedation with nitrous oxide and oxygen basically aims to reduce the anxiety of the patient, thus increasing his/her pain threshold. It is a state of depression induced with nitrous oxide and oxygen that will aid the forensic dentist to complete the cases with satisfactory information. Identification can be done by conventional, panoramic and digitalized radiographs. In human identification, radiographs from the skull, face or teeth can help estimating the age of children and adults. Post-mortem radiographs may reveal evidences of ante-mortem dental treatments that will help in human identification. The work of the forensic dentist becomes easier when a good documentation, especially complete dental radiological documentation, is available.

Analysis of the sealing capacity of apical plugs prepared with gray MTA Angelus®, CPM® and MBPc cements

Fidelis, N.S.; Orsoco, F.A.; Bramante, C.M.; Garcia, R.B.; Bernardinelli, N.; Borgto, M.V.; Moraes, I.G.

The purpose of this study was to evaluate the sealing capacity of apical plugs prepared with gray MTA Angelus®, CPM® and MBPc cements. Ninety-eight human single-rooted teeth were first hand instrumented in a crown-down direction, then prepared with Gates-Glidden drills (from #5 to #1) and finally with #50 to #90 K-files. The #1 Gates-Glidden drills and all files passed 1 mm beyond the apical foramen. The external surface of the teeth was rendered waterproof and the teeth were assigned to 3 groups (n=30), according to the materials used in apical plug preparation, as follows: Group 1: gray MTA Angelus®; Group 2: CPM®, Group 3: MBPc. Eight teeth served as positive and negative controls, in which apical plugs were not prepared. The sealing capacity was analyzed by the assessment of 2% Rhodamine B dye leakage, after immersion of the teeth for 48 hours at 37°C. Kruskal-Wallis and Dunn’s tests were used for statistical analysis (p<0.05). The results showed that, comparing the sealing capacity of the tested materials, MBPc presented statistically significant better results than the other cements.

Is it necessary the use of matrix in perforations treated with MTA?

Assumpção, T.S.; Moraes, I.G.; Bernardinelli, N.; Garcia, R.B.; Broon, N.J.; Bramante, A.S.; Bramante, C.M.

Among the different types of treatments for tooth perforations, there is sealing with calcium hydroxide and, more recently, mineral trioxide aggregate (MTA). The aim of the present study was to show the importance of matrix use when the perforation is sealed with MTA and to describe the technique for this preparation. MTA insertion should be carefully done not to extrude to the periodontal space because it could impair the repair process. Matrix preparation is important to prevent this occurrence. This matrix can be fabricated from calcium hydroxide or calcium sulfate, which are inserted via perforation, for further insertion of MTA.

Treatment option for avulsed permanent teeth

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Dental avulsion is a complex injury that affects the pulp tissue, periodontal ligament and alveolar bone. It is more frequent in children aged 7 to 11 years. The prognosis is directly related with the extra-alveolar time and there is a consensus regarding the fact that the shorter the period (<30 minutes), the better the possibility of pulp revascularization and periodontal ligament fiber reinsertion. Likewise, the need of maintaining the avulsed tooth in an adequate storage medium is consensual. This work reports a case of replantation of an avulsed maxillary right incisor, which was rendered complex because the clinical attendance was undertaken 48 hours after the injury and the avulsed tooth was kept dry by the patient, a 10-year-old male child. The dental care was provided at the emergency service of the Dental Clinic of UEM-Pf. The radiographic examination showed integrity of the alveolar wall. The tooth was secured by its crown, coronal access was prepared and the root canal was filled with a calcium hydroxide and propyleneglycol paste because tooth had open apex. The patient received local anesthetics, the blood clot was removed and the alveolus was prepared for replantation. After that, a rigid retention was placed for 7 days and postoperative medication was prescribed. Eight sessions for changes of the calcium hydroxide-based dressing were undertaken during 12 months, followed by the definitive root canal filling. After 18 months, the tooth presents a normal appearance and the radiographic examination revealed a subtle alteration in the apical root third. It may be concluded that, although the initial conditions indicated an unfavorable prognosis and are contraindicated in the scientific literature, a considerable benefit for the patient was achieved, as the treatment allowed the reintegration of the patient to his social life, as well as the maintenance of the growth and face development.

Evaluation of physicochemical properties of retrograde filling sealers containing mineral trioxide aggregate and an experimental epoxy sealer

Vivan, R.R.; Vasconcelos, B.C.; Bramante, C.M.; Garcia, R.B.; Bernardinelli, N.; Moraes, I.G.

This study evaluated some physicochemical properties of different retrograde filling sealers containing mineral trioxide aggregate (MTA) and an experimental epoxy sealer. The cements comprised ProRoot MTA, gray MTA-Angelus®, white MTA-Angelus®, and experimental epoxy sealer.