



ABSTRACTS

Part “Oral & Dental Medicine”

LABORATORY ABNORMALITIES IN PATIENTS WITH ORAL BURNING

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Abstract

There are a number of possible causes of burning mouth syndrome, including damage to nerves that control pain and taste, hormonal changes, dry mouth, which can be caused by many medicines and disorders such as Sjögren’s syndrome or diabetes, nutritional deficiencies , oral candidiasis, a fungal infection in the mouth, acid reflux , poorly-fitting dentures or allergies to denture materials, anxiety and depression.

The aim of this study is to assess the clinical importance of abnormalities of folic acid and B 12 serum levels in patients with oral burning

PRESENCE OF HELICOBACTER PYLORI IN PATIENT WITH ORAL MALODOR

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Abstract

The exact pathophysiological mechanism of halitosis is not clear, and in many patients the etiology is an enigma. In 10 to 20% of cases, bad breath is caused by systemic disorders such as hepatic, pancreatic and nephritic insufficiencies, trimethylaminuria, upper and lower respiratory tract infection, medication and cases where gastric content may generate oral malodor. Some authors observed association between H. pylori and burning and halitosis. The other reported that the halitosis disappearing along with eradication of the infection with H.pylori.

The aim of this study is to investigate how many patients with halitosis are positive to helicobacter pylori and is there a relationship between bad breath and bacteria.

HALITOSIS - SELF-ESTIMATION OF MALODOR IN HEALTHY AND IN PATIENTS WITH DIFFERENT ORAL COMPLAINTS

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Abstract

Oral halitosis is an unpleasant multifactorial oral condition that has health and social implications. Ninety percent of patients suffering from halitosis have oral causes, such as poor oral hygiene, periodontal disease, tongue coating, oral disease and throat infections. The remaining 10 percent of halitosis sufferers have systemic causes

65 patients participated in this study. They completed a questionnaire regarding presence or absence of oral complains, oral halitosis, general health problems and their opinion about the causes and most effective treatment of halitosis.

TRANSMISSION OF P.GINGIVALIS FROM CAREGIVERS TO CHILDREN

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Summary:

Periodontal diseases are socially significant diseases, which occur in adults but in children and adolescents as well. Despite a low prevalence of aggressive periodontitis at a young age, its severity is a challenge for pediatric dentistry.

The goal of this study is to find if the prevalence of Porphyromonas gingivalis among children whose parents suffer from periodontal diseases is greater than among children with healthy parents.

Methods:

- Polymerase chain reaction (PCR).
- Culture method.

When PCR was used P.gingivalis was found in 35.5% of parents with periodontitis and in 6,5% of their children, children with healthy parents and their parents. No statistically significant relation ($P>0.05$) between periodontal parents and their children was found.

When culture method was used P.gingivalis was not detected.

Studying such correlations and standardizing methods of detection could contribute the evaluation of periodontal disease risk in adolescents.

Key words: P.gingivalis, transmission, periodontitis, plaque

CORRELATION BETWEEN POLLEN AND FOOD ALLERGY

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Abstract:

Introduction: It is now determined that 50% of people, suffering from pollen allergy, develop different forms of food allergy. The main manifestation is oral allergy syndrome (OAS). The risk for food allergy is increasing when the patient has concomitant allergy to pollen and latex, which is of great interest for us as dentists.

Purpose: To investigate the presence of sensibilization or allergy to foodstuffs and pollens in representative professional group. Another aim is to establish the rate of these allergies' manifestation as oral allergy syndrome or facial erythema, which concerns us directly as working dentists.

Materials and methods: Anonymous questionnaire about the presence of symptoms to food and pollen is filled by the Dental medicine students from the Faculties in Varna and Sofia. Additional questions are for the atopic individuals and these with asthma– the factors, increasing the risk for food and pollen allergy development.

Results: Only a part of the questionnaires is processed till now, so the results are preliminary. Only 13% of the participants report for allergic reactions to foodstuffs, and 8% - to pollens. Urticaria is the major symptom.

Conclusions: Our patients rarely inform us for oral and maxillo-facial manifestations of food allergy. Dentists should take into consideration the atopic ground of these patients which will determine the treatment approach also – these patients should be tested in advance for sensibilization to dental medicines and materials.

Key words: food allergy, pollen allergy, cross reactivity

HEPATITIS B PATIENT WITH FEVER DUE TO FOCAL INFECTION

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A 50 years old woman, febrile for the past two months (max. 38.60C) with characteristic of Febris septica. Reporting for moderate pain and weakness in the four limbs. Diagnosed with chronic hepatitis B two weeks after the fever onset. With elevated aminotransferases, which progressively reached up to 10 times above the upper limit of normal. The patient had HBV-DNA 533 000 000 copies/ml. She had normal blood count and hemoglobin, normal bilirubin and INR; no laboratory data for autoimmune liver disease. She had progressive hypoalbuminemia, elevated CRP and prominent liver necrosis with ALT predomination, no liver decompensation. She underwent consultations with endocrinologist, rheumatologist, neurologist, gynecologist, pulmonologist and infectionst. All negative for any disease, also negative serology for Lyme disease. She had no data for urine infection. She had negative cultures. The patient was treated with corticosteroids for 30 days with no effect; she had no response to treatment with Gentamycin, Amoxicillin, Azithromycin, Ciprofloxacin, Methronidazole, Meronem, Clindamicin and Nystatin. Only reduction but not normalization, of CRP was observed, the fever remained. The patient underwent focal dental diagnostic with test of Gelen, which found no active zones but potential focuses. These focuses were extracted and the patient became afebrile 5 days afterwards. Her liver enzymes, CRP and albumin returned to normal. In addition she received Lamivudine as specific antiviral therapy for the chronic HBV-infection.

PATIENT WITH HEPATITIS C UNDER INTERFERON THERAPY - ORAL SIDE EFFECT WITH ORAL LOCALIZATION

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Abstract

One of the most difficult things for people on hepatitis C therapy to deal with is the side effects caused by the interferon injections and ribavirin pills.

Side effects vary a lot from person to person.

The aim is to present the possible side effect of medication therapy with oral localization with Pegasys and Copegus.

EXTRAORAL AND ORAL SIGNS IN TWO PATIENTS WITH STURGE-WEBER SYNDROME

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Abstract:

Sturge-Weber syndrome is a rather uncommon congenital condition characterized by the combination of ipsilateral angiomatous lesions of the face, oral soft tissues, jaws with venous angioma of the leptomeninges over the cerebral cortex .

We introduce the oral end extraoral manifestations in these patients and difficulties in the diagnostic and treatment process .

X-RAY WORKING LENGTH DETECTION OF CURVED ROOT CANALS

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Abstract:

Curved root canals are challenge for instrumentation, preparation, irrigation and obturation. The aim of the present study is to measure the working length efficiency in root canals with curvatures 30°-45° and in root canals with anatomical abnormalities 45°-90°. 68 matured, extracted molars with 201 root canals are included in the study. Molars are placed in three groups in relation to the angle between the root and the axis. Straight - 25° - 30° as a control group with 14 teeth and 45 root canals. The second group is with 25-30° to 45° ,n=22 teeth with 66 root canals and third group 45° to 90° with n=31 teeth with 96 root canals. Measurements: mesio-distal buccal size of the chamber in its largest size and both bucco-lingual sizes – mesio as L1 and distal as L2. Root canal preparation: extraction of the root pulp with K endfiles number 6,8,10, with Step Down and Balance force techniques. Canals length is measured rentgenologically using the following scale: 3- all working length, 2 – 1 mm shorter from the working length , 1 - 2 mm shorter from the working length and 0 – more than 2 mm shorter than the working length. X-ray WL detection of molars with root canal curvatures can be more accurate, for well trained examiners, compared with straight roots,

due to the fact that in straight roots more often hyperinstrumentation can occur. Only radiologically with WL of root canals can be investigated the level of dimension of curved root canals.

AN IN VITRO STUDY ON DENTINE DEFECTS AFTER OBTURATION OF ROOT CANALS WITH DIFFERENT TECHNIQUES

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Abstract:

Condensation and central cone techniques are different approaches and different methods well established in dental practice. The aim of the present study is to compare in an in vitro study the presence or absence of dentine defects in human extracted sound molars treated with same preparation techniques and different obturation techniques. 103 sound human molars are included in the study with 245 roots, 309 root canals, 206 of them filled with CCT and 103 with LK. After x-ray and positive results from the treatment and absence of complications all teeth are treated with methylene blue for visualization of dentine defects. Gaps and microfractures originated from the lumen of the canal towards the root external surface are observed under magnification x5 after sectioning the roots 2/3 from the apex and 1/3 from orifices measured for each particular tooth. 99 gaps are found, 13 multiple on 12,6% of the roots, 3:1 more in lower teeth. The frequency is equal in LK and CCT in upper and lower molars. Equal are the gaps compared with microfractures in both jaws. 33,9% from lower and 34% from upper teeth are with dentine defects. The equal frequency of dentine defects in LK and CCT, makes LK less suitable method for medial and buccal root canals of molars and not recommended for elderly patients.

POSSIBILITY OF EARLY DETECTION FOR OSTEOPOROSIS IN PEOPLE ABOVE 55 YEARS OF AGE BY MEANS OF PANORAMIC RADIOGRAPHY

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SUMMARY:

Osteoporosis is a condition characterized by a loss on bone mineral density and there is micro-architectural deterioration in bone tissue leading to fracture.

Dental radiographs are the most frequently used imaging modalities for teeth and jaw pathology.

The purposes of this study were to review the role of panoramic radiograph in routine dental treatment for an initial evaluation of osteoporosis and to discuss the reliability and accuracy of reported panoramic indices.

We present to the dental society the Klemetti index (Mandibular cortical index- MCI). In this technique the inferior cortex both sides of the mandible, distal to the foramen mentale, is classified into three groups, according to the mandibular bone thickness, shape and porosity.

C1- normal cortex- the endosteal margin of the cortex is even and sharp on both sides.

C2- mildly to moderately eroded cortex, the endosteal margin has resorptive cavities with cortical residues one to three layers thick on one or both sides.

C3- Severely eroded cortex, the cortical layer forms endosteal cortical residues and is clearly porous.

Patients having positive findings related to MCI should be evaluated further for potential risk of osteoporosis and could be referred to a medical specialist for densitometry.

In conclusion, valuation of mandibular cortical index (thickness and shape of inferior cortex of mandible), measured from panoramic radiography was a simple technique in osteoporosis screening of dental patients, giving the maximum benefit of being radiographed.

KEY WORDS: Mandibula, Klemetti index (Mandibular cortical index- MCI), Panoramic radiography, Osteoporosis, Dental treatment.

ROOT CARIES PREVALENCE IN PATIENTS FROM THE FACULTY OF DENTAL MEDICINE – SOFIA

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Abstract:

The aim of the present study was to measure the root caries prevalence in a group of Bulgarian adults. The data was collected with interview, administrated questionnaire and an oral examination. The prevalence and oral distribution of caries lesions on root surfaces were assessed in patients aged from 25 to 88-years-old. The total number of patients was n=582: 202 (34,7%) males and 380 (65,3%) females. Eight hundred and nine root caries lesions were observed. A significantly higher scores of the frequency of root caries was

observed in older individuals, reaching its peak between 65 and 69-years-old. From this study can be concluded that root caries is present and increasing in cohort groups in Sofia.

IN VITRO EVALUATION OF MICROLEAKAGE OF GIOMER AND SILORANE BASED RESIN MATERIALS

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Abstract:

The aim of the present study was to measure the microleakage of two new esthetic restorative materials – giomer (Beautiful) and silorane based (Silorane, 3M-ESPE) resin materials. Thirty-six class V cavities were prepared on sound extracted human teeth. The samples were randomly assigned in two groups. The tested materials were applied according to manufacturer's instructions. All teeth were thermo cycled 300 times (5–55°C) and then treated with 2% methylene blue solution. The teeth were sectioned longitudinally and microleakage evaluated. Different levels of microleakage were found for the tested materials. Worse sealing ability for both materials was observed on the gingival margin.

RESTORATION OF ENDODONTICALLY TREATED POSTERIOR TEETH WITH INDIRECT COMPOSITE – 6-MONTH RESULTS

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Abstract:

Indirect composite resin restorations offer maximal preservation of sound tooth structure and periodontal health. They are both a contemporary and not sufficiently studied and utilized approach to restore endodontically treated teeth.

Aim: To evaluate the clinical performance of indirect composite restorations on endodontically treated posterior teeth for an observation period of 6 months.

Materials and methods: The study included 65 patients and 126 composite restorations - 41 direct (control group, SDR, Ceram X Mono/ Dentsply) and 85 indirect (In:Joy). At baseline and at 6 months they were evaluated using modified USPHS and FDI - criteria, digital pictures and X-rays. For the statistical analysis were used the Pearson Chi square test and SPSS version 19.

Results: There was no statistically significant difference between results obtained at baseline and 6-month recall ($p > 0,05$).

Conclusion: Indirect composite restorations on endodontically treated teeth demonstrated excellent and promising clinical performance after 6-month period of functioning.

Key words: composite, indirect restorations, endodontically treated teeth

APPLICATION OF Nd – YAG LASER TREATMENT FOR ORAL LEUKOPLAKIA

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Abstract

High energy lasers are used as an alternative to conventional surgery for treatment of oral leukoplakia. The purpose of this study is to monitor the effectiveness of Nd – YAG laser as treatment for oral leukoplakia. Seventeen patients were followed-up with oral leukoplakia for the period 2005-2011. Nd – YAG laser was used with following parameters: λ - 1064 nm, 10 – 15 W, T 40 – 70 sec. Early postoperative results were monitored considering criteria pain, redness, swelling each 1, 3, 7 days. The effect from the treatment was determined by recording the changes in size of the lesions each 1, 2, 3 months. The results which reflect effectiveness of treatment within the observed period showed that twelve patients were complete respondents, two responded partially, and three did not respond. The treatment of oral leukoplakia through the application of Nd – YAG laser is characterized with good therapeutic effect and smooth postoperative period, without significant pain and discomfort, making it appropriate clinical solution.

Key words: oral leukoplakia, treatment, Nd – YAG laser

LASER VS. CONVENTIONAL PREPARATION

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Abstract:

Introduction: The Er:YAG lasers at wave length of 2940 nm have the highest specificity for water absorption of the mid infrared lasers. Er:YAG laser has the ability to ablate hard and soft tissues with minimal thermal damage. Because of their absorption peak in water, Er:YAG generated photons warrant strong consideration as an useful tool to cut mineralized biological tissues – such as natural tooth structure and bone.

Purpose: To investigate the advantages of using Er:YAG laser compared to conventional handpiece for caries removal and cavity preparation.

Materials and methods: Er:YAG laser with tips and dental turbine, counter-angled handpiece, diamond and steel burs are used for cavity preparation in similar clinical situations. The results are presented on pictures under magnification.

Results: Laser preparation of tooth structure gives us a surface with micro-irregularities, with no smear layer and open tubules – conditions that improve the adhesion of the filling material and eliminate the need of etching gel use. There is no extensive thermal effect on the enamel layer and the tissues underneath. The major advantage of Er:YAG laser compared to mechanical therapy is the bactericidal effect of laser. Non-contact working with laser reduces the feeling of pain (there is almost no sensitivity), which saves us the need of using anesthesia.

Conclusions: Less pain, less noise, no vibration – all these factors give the patient bigger comfort and wipe out the fear of needles, because anesthesia is unnecessary. High bactericidal effect and better adhesion of fillings is achieved after laser preparation.

Key words: Er:YAG laser, cavity preparation

STONE CASTED WORKING MODELS

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Abstract:

Introduction: The main criteria for selection of working models systems in the dental laboratory are: 1. Stability of the working model and removable stumps in processing – to create the stability, even of the thinnest (cut) elements 2. To recreate the same situation before separation. Restoration of the removable parts must be stable and accurate 3. Accuracy of the structure on the border preparation, proximal and articulation contacts, gingival anatomy and interdental papillae. Possibilities to use resin gingival restoration for implant systems, etc.

Purpose: To compare several model systems and explore their success.

Materials and methods: Model systems: working system with removable stone stumps, with removable arms, with precise pin fixation.

Results: 1. Working systems with stone stumps: time-spending system. It is an imprecise system (stone abrasion and friction).

2. Working system with removable arms. The big problem here is the restoration in lower frontal area, especially with gentle teeth. Often radial cuttings of the stumps in lingual surface are not fixed.

3. Precise pin-system. Perfect pin position- the pins and sleeves are always absolutely parallel. The plastic or metal sleeves prevent stone abrasion which may occur during repeated removal and reinsertion of dice. There is perfect access to the gingival mucosa and ability to restore the gingiva.

Conclusion: The main tendency in working models systems is absolute precision. These systems should allow restoration of marginal mucosa, laser targeting and positioning of removable double pins, which is necessary for exact dental lab work.

BIOMEMBRANES WITH AUTOLOGOUS GROWTH FACTORS

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ABSTRACT:

Introduction: Collagenous resorbable or Teflon non-resorbable membranes are present in all protocols of different bone augmentation techniques. Their purpose is to prevent migration of epithelial cells in the bone graft, thus providing an opportunity for migration of bone cells. The use of platelet-rich growth factors enables accelerating augmentation procedures and ensures smooth postoperative period and healing by primary intention without dehiscence and inflammation.

Materials and methods: Platelet-rich growth factors are derived from patient's peripheral blood by centrifugation and separation of platelet derivatives. Platelet-rich plasma is activated by CaCl₂ and an appropriate in shape and texture mass called PRGF is formed to cover the operative field.

Results: 42 augmentation procedures with PRGF on 38 patients are done for 12 months. The results show 95% healing by first intention of the operative wound with smooth postoperative period without dehiscence and inflammation.

Conclusion: Easy technique, low costs and positive results determine the use of PRGF in all bone augmentation procedures and implant treatments.

Key words: Bone augmentation, PRGF.

IMPROVEMENT OF ANATOMO-TOPOGRAPHIC CONDITIONS FOR IMPLANT TREATMENT- AN OVERVIEW

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ABSTRACT:

Introduction: The lack of height and width of the alveolar bone was considered a contraindication for implant treatment for years. Today we have enough practical and theoretical experience to achieve better conditions for implant treatment using specific surgical techniques during implantation or before that. Surgical protocols and methods for planning continue to be combined and improved to achieve optimal results.

Materials and methods: 12 clinical cases with lateral accessed sinuslift, 8 cases with minimal invasive crest accessed sinuslift using classical Summers Technique, 6 cases with hydropneumatic sinuslift, 8 block grafts of mandible for vertical augmentation and 3 block grafts of maxilla for lateral augmentation, 9 split crest augmentation (7 of them on mandible and 2 on maxilla), 2 lateral augmentations using classical Khury technique and 3 using modified one, 2 vertical augmentations of mandible using Kablan technique, 34 postextractional augmentation. Screws for osteosynthesis, fixing pins, collagenous resorbable and non-resorbable membranes, non-resorbable and resorbable bone replacement materials, PTFE sutures.

Results: The highest success rate – 95% is for augmentation after extraction, crestal core elevation, split crest, 91%- lateral window technique, 86%- modified Khury technique, 60%- classical Khury technique and block graft.

Conclusion: Each technique has its own specifics but the following is important for all techniques: soft tissue management of the flap, healing by first intention of the operative field, no dehiscence, immobilization of the graft, lack of masticatory pressure in the graft area. The possibility of using PRGF, stem cells, piezosurgery and high and low intensity lasers can significantly increase the success rate and shorten the periods for osseointegration.

Key words: Sinuslift, split crest technique, block graft, Khury technique

SELECTION OF IMPLANTOLOGY SYSTEM AND SURGICAL PROTOCOL FOR DIFFERENT TYPES OF BONE

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ABSTRACT:

Introduction: Nowadays hundreds of implant systems are offered worldwide. The standard of implant macrodesign is screw, conical and cylindrical titanium implant with internal hex and different in depth and inclination inner cone. Furthermore, surgical kits for almost all implant systems include a standard set of millings divided by lengths and diameters. On the other hand, jaw bone is divided into 4 groups according to the ratio of compact and spongy bone which is associated with bone density. It is reasonable to assume that different bone density requires both different macrodesign and various set of instruments and suitable surgical protocol.

Materials and methods: Nine implant systems with different macro- and microdesign are used in this study. Total number of 340 implants are placed with different surgical protocols in bone with sufficient volume, but different density.

Results: High level of crest resorption is reported for implants placed by standard surgical protocol in D1 and D2 bone type. No crest resorption is reported for strictly individual selection of implant macrodesign and surgical protocol.

Conclusion: In modern implant treatment strictly individual approach in the selection of implant system and surgical protocol according to bone density for long-term positive results is necessary.

Key words: Standard surgical protocol, bone density, individual approach

EVALUATION OF A COMBINED METHOD OF GUIDED BONE REGENERATION FOR TREATMENT OF LARGE AND THROUGH-AND-THROUGH MANDIBULAR DEFECTS AFTER ENUCLEATION OF JAW BONE CYSTS

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Summary

Objective: The aim of the study was to evaluate the effectiveness of guided bone regeneration with collagen membranes and bone substitutes for treatment of large or through-and-through defects created after enucleation of benign mandibular cystic lesions.

Materials and methods: Thirty defects in twenty seven patients (17 men and 9 women) with cystic lesions were treated with allogeneous collagen membranes and demineralized freeze-dried bone allografts and followed-up for 6-24 months.

Results: Clinical investigations showed minimal complications, low-rate resorption and stable biometric parameters of the reconstructed mandible. Changes in radiologic bone density were initiated 3-6 months after enucleation with 89.62% structural recovery between the 18th and 24th month.

Conclusions: Guided bone regeneration may contribute for adequate regeneration and rehabilitation of large defects created after enucleation of benign mandibular cystic lesions.

Key words: mandibular cysts, large bone defects, through-and-through defects, mandibular reconstruction, guided bone regeneration, allogeneous collagen membranes, demineralized freeze-dried bone allografts

GUIDED BONE REGENERATION WITH COLLAGEN BARRIERS AND PARTICULATE DEMINERALIZED FREEZE-DRIED BONE ALLOGRAFTS FOR RECONSTRUCTION OF LARGE AND THROUGH-AND-THROUGH CYSTIC DEFECTS OF THE MAXILLA

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Summary

Objective: The study was designed for assessment of guided bone regeneration with allogeneous collagen membranes and demineralized freeze-dried bone allografts for treatment of large and through-and-through defects of the maxilla after enucleation of benign cystic lesions.

Materials and methods: Twenty six patients (15 men and 11 women) with cystic lesions were treated and followed-up clinically and radiologically for 6-24 months.

Results: Clinical investigations showed uneventful healing in 25 patients, stable biometric parameters and minimal resorption of the reconstructed segment of the maxilla. Changes in radiographic density were initiated 3-6 months after enucleation with 79.62% structural recovery of the affected bone between the 18th and 24th month as evaluated on panoramic radiographs.

Conclusions: Guided bone regeneration may contribute for regeneration of large cystic maxillary defects as preparation surgery for further rehabilitation with dental implants

Key words: maxillary cysts, large bone defects, through-and-through bone defects, alveolar reconstruction, guided bone regeneration, allogeneous collagen membranes, demineralized freeze-dried bone allografts

COLLAGEN BARRIERS AND DEMINERALIZED FREEZE-DRIED BONE BLOCK ALLOGRAFTS FOR TREATMENT OF LARGE AND THROUGH-AND-THROUGH CYSTIC LESIONS OF THE JAWS

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Summary

Objective: The goal of the study was to evaluate guided tissue regeneration with allogeneous collagen membranes and demineralized freeze-dried bone block allografts for treatment of large and through-and-through cystic lesions of both jaws.

Materials and methods: Twelve patients (10 men and 2 women) with cystic lesions of the jaws were treated with block allografts and collagen membranes and then followed-up clinically and radiologically for 12-24 months.

Results: Nine defects healed uneventfully. In the rest three cases localized dehiscencies appeared 4, 5 and 6 week after the operation. In one of these patients the dehiscence was accompanied with rejection of small part of the allograft. All dehiscencies were treated with oral antiseptics and in-office hygienic measures and by second intention healed within 3 weeks. Radiographic density of the borders of the allografts showed full incorporation between the 18th and 24th month after the operation.

Conclusions: Guided bone regeneration may contribute in the treatment of large cystic jaw bone defects as preparation surgery for further prosthetic rehabilitation.

Key words: jaw bone cysts, large bone defects, through-and-through bone defects, jaw reconstruction, guided bone regeneration, allogeneous collagen membranes, demineralized freeze-dried bone block allografts

LATE RESULTS IN TOTALLY EDENTULOUS PATIENTS TREATED WITH REMOVABLE COMPLETE DENTURES IN FDM - VARNA

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Abstract:

Introduction: Total edentulism affects a large number of elderly people. It influences not only the aesthetics, speech and mind of the patients, but also general health by impaired mastication. Classical removable complete dentures are applied for treatment of totally edentulous patients by undergraduate students (3rd, 4th and 5th year of academic education) and pre-graduate students (6th year of education), supervised by assistant professors.

Purpose: The aim is to present the most common late complications following removable denture treatment, carried out by undergraduates / fabricating dentures on their own/ and pre-graduates/ collaborating with dental technicians/.

Material and Methods: Clinical examination of a few patients with late results after treatment in FDM-Varna.

Results: Soft tissue injuries were observed on regular check-ups of the patients treated by undergraduates. They were mainly traumatic lesions of the prosthetic field such as decubital and aphthous ulcerations, lesions of frenulums or gingivo-buccal insertions as a result of poor fitting dentures, long prosthesis edge, lack of space for frenulum or gingivo-buccal insertions, cheek/tongue biting etc.

As far as pre-graduates are concerned, late results are mostly reduced in severity to mild erythema and edema of the mucosa due to some features of the prosthetic field and ill-fitting dentures.

Conclusion: The most common mistakes in both clinical and laboratory stages are reduced under the supervision of assistant professors. The quality of complete dentures improves and serious soft tissue injuries are rarely observed.

REDUCTION OF NASAL TURBINATE BY RADIO-FREQUENT THERMOTHERAPY

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Abstract:

Introduction: The application of bipolar radio-frequent thermotherapy in medicine and dentistry started during the last fourteen years. We use these devices for reduction of the inferior turbinate, which is enlarged in patients with allergic and vasomotor rhinitis. This is an effective, safe and not difficult procedure.

Material and methods: The bipolar applicators are introduced into the tissue to be treated. This way I patient's body high-frequent bipolar current is induced. The radio-frequent current is generated between a couple of electrodes in the probe. Because of the electrical resistance in the treated tissue the heating is slow and the coagulation is meticulous.

Results: The inferior turbinate enlargement is a common problem in otorhinolaryngology. We have about 700 such patients. 170 of them were treated by the conventional surgery method (conchoplasty), 156 patients were operated by Olympus- Celon ab ENT device and 48 patients were treated by Arthrocare device. In 10 cases nasal polyps were also extracted. In 85 patients rhino-manometry was done before treatment.

Discussion: The main advantages of radio-frequent surgery with CELON lab are the exact and precise treatment of the inferior turbinate. The applicator is introduced under the nasal mucosa.

Conclusions: The method is tissue sparing and well tolerated by the patients. We have seen no complications in all the cases done. Nasal tamponade is unnecessary. The control rhinomanometry showed significant breathing improvement.

Key words: radio-frequent surgery, allergic rhinitis, bipolar radio-frequent thermotherapy

PRP – USE OF AUTOLOGOUS GROWTH FACTORS IN BONE REGENERATION

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Abstract:

This presentation focuses on the main growth factors, used for enhancement of bone regeneration. It introduces the basic methods and the common mistakes in terminology and procedures. It, also, discusses severe late complication of the use of different blood product, containing growth factors

“ERGONOMIZATION” OF THE WORKING ENVIRONMENT AND BUILDING UP OF HEALTHY WORKING POSTURE OF DENTAL STUDENTS

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The purpose of this study was to assess the knowledge of dental students of the ergonomics' principles and how they develop adequate skills to work safe in clinic.

Methods: A questionnaire comprising a set of 25 close-ended questions and 2 open-ended questions to rate the knowledge, attitude and motivation of students regarding the good posture, training environment and real clinical practice organization, was distributed among 260 dental students from a total of 685 students. Data were treated statistically using SPSS Version 16.1. In addition, demonstration of proper working posture and training in had been given to students and registered.

Results: The response rate was at 74,62% - 194 respondents, 44,3:55,7 male: female students with mean age of 22,3 years. Most of students report they know the right working posture (52,6%) or “have an idea” (36,6%). Almost all of them are persuaded it is important to work in good posture (95,9%). Their knowledge are achieved from: the course of dental public health (34,1%), their clinical teachers (27,3%), practical training (15,3%) self-education (16,2%). They would like to be trained in ergonomics (96,4%), and think it should be done before graduation (90,2%). Students agree on integrating ergonomic training into the clinical training and think it is possible (73,6%). There is no significant difference according to sex and year of study. Students working and those originating from dental families are at some extent more curious about the ergonomic matters (64% versus 36%). Sports' practice is also some predictor of higher level of knowledge and motivation. The post-survey evaluation of skills during clinical training showed lower rate of knowledge than previously reported.

Conclusion: Students are aware of the importance of the good practice of ergonomics. They expect to use the theoretical knowledge in dental clinic under supervision. They really need appropriate training in addition to theoretical studies. The data could provide evidences and justify steps for strengthen focus on building up a healthy working posture.

Key words: dental ergonomics, logistic training, dental education, professional health of dentist