

PP 01-01

Anterior Open Bite and Oral Habits in Toddlers

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Aim: To assess the prevalence of anterior open bite (AOB) in toddlers and the relationship between AOB and oral habits (OH).

Materials and Methods: Cross-sectional retrospective study on a sample of 160 toddlers (88 boys) aged 1-3 years (mean age=2.26±0.64 years) attending 2 nurseries from Ploiești (Romania). Data was obtained from medical files and clinical examination. Prevalence and distribution of AOB and OH (pacifier, lower lip sucking, tongue thrusting) were assessed. Statistical analysis was performed using ANOVA, correlations and independent t-tests (p<0.05).

Results: a) 89(55.62%) children had neutral occlusion and 71(44.38%) had malocclusions; b) 26(16.25%) children had AOB, representing 36.62% of all malocclusions; c) gender distribution of AOB: 19.32% boys, 12.5% girls (NS); d) age distribution of AOB: 7(17.07%) – age 1 year, 15(16.48%) – age 2 years, 4(14.28%) – age 3 years (NS); e) 32(20%) of all toddlers (20.45% boys, 19.44% girls) had non-nutritive OH; f) occlusion of children with non-nutritive OH: 50% - AOB; 28.12% - neutral; 21.88% - deep bite; g) 16(61.54%) of children with AOB and 16 (11.94%) of those without AOB had non-nutritive OH (SS, p=0.000); h) OH in children with AOB: 12(75%) – pacifier, 2(12.5%) - pacifier and lower lip sucking, 1(6.25%) - pacifier and tongue thrusting; 1(6.25%) - lower lip sucking.

Conclusions: No relationship was found between anterior open bite and toddlers' age/gender but there was a correlation with non-nutritive oral habits. Anterior open bite was strongly associated with pacifier sucking. Early orthodontic check-ups and monitoring are recommended for efficient management of function-related malocclusions.

Keywords: Anterior open bite, oral habits, toddlers

PP 01-02

Special Olympics Special Smiles in Romania – Effectiveness over a Decade

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Aim: Special Olympics - Special Smiles (SO-SS) programs provide oral screenings for mentally challenged athletes and adapted oral health education both for athletes and their caregivers. To assess the effectiveness of SO-SS in Romania over a decade (2006-2016).

Material and Methods: Romanian SO athletes were examined under field conditions, during SO competitions. Demographic data (age, gender), dental status (sound, decayed, filled, sealed, extracted) and periodontal conditions were individually recorded. DMF-T and restoration index RI = [F/(F+D)]x100% were calculated. Data from 2006 (n=293, aged 8-27 years) and 2016 (n=249, aged 6-44 years) were compared using SPSS 20.0.

Results: Caries free athletes: 13.3% (2006) versus 23.7% (2016). DMF-T: 5.84 (2006) versus 7.76 (2016). RI significantly increased (p<0.01) from 10.07 (2006) to 25.75 (2016). Percentage of subjects with RI >= 80%: 3.6 (2006), compared to 17.2 (2016). 79.4% of the athletes examined in 2006 had RI <= 10%, compared to 59% in 2016. In 2006, 2% of the examined athletes had sealants, versus 4.4% in 2016. 50.5% of the 2006 subjects had gingivitis versus 73.5% in 2016.

Conclusions: Oral health of Romanian Special Olympics athletes has improved over the past decade. Their dental treatment needs tend to be better managed now than in the past. Mentally challenged people still have relatively poor oral health and limited access to dental treatment in Romania. More targeted programs are needed in order to raise awareness, to prevent oral disease and to improve access of mentally challenged people to effective professional oral care.

Keywords: Mentally challenged, oral health, Special Olympics

PP 01-03

The Relationship Between The Knowledge and Attitude Towards Prevention Among Final-Year Dental Students at Istanbul University**Arzu Pinar Erdem¹, Kadriye Peker², Esra Tarakçı³, Sinem Kuru¹, Elif Sepet¹**¹Istanbul University, Faculty of Dentistry, Department of Pedodontics, Istanbul, Turkey²Istanbul University, Faculty of Dentistry, Department of Public Health, Istanbul, Turkey³Istanbul University, Faculty of Dentistry, Private Dentist, Turkey

Aim: Dental students' knowledge and attitudes towards prevention can provide the framework for their future practices and professional work. The aim of this cross-sectional study was to determine the relationship between the knowledge and attitude towards prevention among final-year dental students at Istanbul University.

Material and Methods: Data were collected from a convenience sample of 126 dental students using questionnaires including a sociodemographic section, the Professional Preventive Knowledge Scale and the Attitudes Scale towards prevention. Data were analyzed using descriptive statistics, t-test, and Pearson's correlation coefficient. The 15- item Professional Preventive Knowledge Scale was developed for this study through reviewing published literature and it is based on a 5-point Likert scale. The Attitudes Scale towards prevention consisted of 8 items, which are rated on a 7-point Likert scale.

Results: A total of 126 students (22.79 ± 1.14 mean age) completed the questionnaire and 63 percent of the respondents were female. No significant gender difference was found in total knowledge scores ($p>0.05$). Female students had significantly more positive attitudes towards prevention than male students ($p=0.016$). Significant correlations were found between knowledge and attitudes scores ($r= 387$; $p<0.001$). The Professional Preventive Knowledge Scale and the Attitudes Scale towards prevention showed satisfactory internal consistency (Cronbach's $\alpha >0.70$).

Conclusion: The level of knowledge towards preventive practice of dental students should be improved through the integration a more comprehensive preventive dentistry program into dental curriculum.

Keywords: Dental students, knowledge, attitude, prevention

PP 01-04

Evaluation of Dental Anxiety in a Group of Children: A Pilot Study**Betül Kargül, Oğuz Bilgiç**

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Aim: Dental fear is a key factor that may cause patients to avoid, delay or cancel dental appointments. Dental fear in children measure using various behavioral ratings during dental visits, such as Facial Image Scale(FIS), which is the most widely used scale for children. Aim of the present study is to evaluate dental fear in children in different age group during first dental visit using FIS.

Methods: The sample comprised 99 children (45 girls and 54 boys) mean age 8.56±1.84 years, (range 6 to 12), at the Department of Pediatric Dentistry, Dental School, in Istanbul, Turkey. For evaluation of dental fear in children, Facial Image Scale(FIS) was used. The data obtained through the questionnaire were entered into Excel Sheet and statistical analysis was carried out using Chi-square test.

Results: The mean FIS score was 2.43±1.44 for all study population. The FIS values in girls and boys were 2.29±1.29 and 2.56±1.55 respectively. No significant differences in fear scores between boys and girls were found in the present study($P>0.05$). In FIS, the maximum respondents out of the sample population (34.3%) showed FIS score 1 as happy. Since the choice of FIS 4 and 5 was considered to be indicative of dental fear in children, 29.3% of children were found to have dental fear according to FIS.

Conclusion: Dental anxiety is a serious problem which negatively affects the oral health of children and adults. Early detection of the causes of fear is very important in the solution of the problem.

Keywords: Dental anxiety, Dental Fear, CFSS-DS, Parental Anxiety

PP 01-05**Assessment of Knowledge and Attitudes of Parents about Application of Fluoride Varnish in School-based Programme*****Işıl Özgül Kalyoncu, Figen Eren Giray, Betül Kargül****Pediatric Dentistry Department, Marmara University, Istanbul, Turkey*

Aim: The purpose of this study; is the assessment of attitudes of parents in two different socio-economic Classes about the topical fluoride application programme which carried out by the Ministry of Health with the knowledge and also view on topical fluoride applications.

Materials and Methods: Parents of 1st and 2nd grade children at Bayrampaşa Elementary School and ITU Development Foundation Schools included to the study. The data obtained using the questionnaire and than were evaluated.

Results: Parents of the 60 children in the public school 68%(n=41), gave permission for their children to apply topical fluoride in school, while 43%(n=30) of the 70 parents in the private school. Sixteen percentage(n=3) of the parents of the children who did not allow the application of topical fluoride in the public school stated that they were not adequately informed about the application, 26%(n=5) of them did not think it was done in the appropriate environment and 26%(n=5) of them think that fluoride is toxic. Eight percentage(n=3) of the parents of the children(n=40) who did not allow the application of topical fluoride in the private school stated that they were not adequately informed about the application, 20%(n=9)of them did not think it was done in the appropriate environment and 43%(n=17) of them think that fluoride is toxic.

Conclusion: The community based oral health programmes as topical fluoride applications, which play an important role in preventive dentistry. This study shows a lack of knowledge about fluoride among parents should be informed fluoride application procedures

Keywords: Topical fluoride application, preventive dentistry, fluoride varnish

PP 01-06**Evaluation of Success of The Primary Molar Teeth Treated with Hall Technique: 12-Month Follow-Up*****Canan Akdik, Zuhale Kirzioğlu****Department of Paediatric Dentistry, Faculty of Dentistry, Suleyman Demirel University, Isparta, TURKEY*

Aim: In this study, it's aimed to evaluate 12-month follow-up clinical-radiographic success of primary molar teeth treated with Hall technique.

Materials and Methods: Thirty 5-6-year-old healthy patients with Class I occlusion who visited Suleyman Demirel University for treatment were included in the study. Their maximum number of primary molar teeth with deep dentin caries that didn't reach the pulp on occlusal surface were 5-6, and the children were scored 2 on Frankl scale. They found appropriate for study standarts.

Necessary permissions were obtained. Patients weren't treated with local anesthesia and rotating devices. Active caries lesion on occlusal surface of the primary molar teeth of 30 pediatric patients with clinical and radiological indications were removed with an excavator in form of a spoon, placed a stainless steel crown, checked by radiography and glued with glass ionomer cement.

Results: In the clinical evaluation of 30 patients treated with Hall technique at the end of 12-month evaluation period with 3-month intervals, we found that the teeth on which the stainless steel crowns were placed were functional, gums were healthy, all crowns were thoroughly in the mouth, and the patients had no complaints. In addition, radiographical evaluation didn't reveal any pathological conditions including external-internal root resorption, radiolucency in bifurcation region, enlargement in periodontal space or ectopic eruption of first permanent molar adjacent to the stainless steel crown. Oral hygiene of patients were found to be better.

Conclusion: Results of the study demonstrate that, in 12-month evaluation of correctly indicated primary molar teeth which treated with the Hall technique were clinically and radiographically successful.

Keywords: Glass ionomer cement, Hall technique, primary teeth, stainless steel crown.

PP 01-07**Assessment If Parents' Approaches About Preventive Dental Practices in Erzurum*****Ezgi Ersoy, Fatih Şengül, Münevver Kılıç****Department of Pediatric Dentistry, Faculty of Dentistry, Ataturk University, Erzurum, Turkey***Aim:** The purpose of this study is to evaluate the preventive dental practice knowledge of the parents who applied to our department with their children.**Materials and Methods:** This survey study included parents of 303 children (156 girls-147 boys) who applied to Ataturk University, Faculty of Dentistry, Pedodontics Department due to different dental complaints. The mean age of the children was 8 ± 2.7 years (min=4, max=14). Survey questions included tooth paste, fluoride, and fissure sealant topics. SPSS 20.0 software was used for data analysis.**Results:** Parents had taken into consideration the beneficial effects of tooth pastes over gingival health when choosing the type of tooth paste (43.5%). Sources of parents knowledge about fluoride application lead to a significance difference in their acceptance of the application of this kind of treatment to their children ($p < 0.05$). It was also found that parents that had knowledge about fissure sealants (14.6%) were found to be more prone to accept fissure sealant application in comparison to parents that were uncertain or didn't accept this kind of treatment ($p < 0.001$).**Conclusion:** According to data obtained in this study, it has been concluded that most of the parents did not have enough knowledge or had been misinformed about preventive dental practices. It is advisable that parents should be properly informed by dentists about the current approaches in preventive dentistry through the written and visual media.**Keywords:** Pediatric Dentistry, survey, fluoride, fissure sealant, tooth paste**PP 01-08****Comparison of Oral Hygiene Habits of Research Assistant Dentists, Dental Students and Dentist Working at Oral and Dental Health Care Center (Survey Work)*****Gurbet Alev Öztas, Didem Özkal Eminoğlu****Ataturk University, Faculty of Dentistry, Department of Periodontology, Erzurum, Turkey.***Aim:** Protective dentistry is the basic step for oral and dental health. The first consideration in this point is the daily oral hygiene habits. It is generally thought that dentists are motivated to protect their oral and dental health well. The purpose of the questionnaire is to evaluate the oral hygiene habits of the dentists and dental students in a comparative way.**Materials and Methods:** The questionnaire survey was carried out on 200 people, 50 research assistants dentists (Group 1), 50 3rd and 5th grade dental students (Group 2-3) and 50 dentists working at Oral and Dental Health Center (Group 4). 12 questions were asked about oral hygiene habits and the answers were Classified into 3 categories. Data from the 4 groups were analyzed using the chi square independence test. According to the results obtained, this ratio is decreasing from the groups 4th, 3rd and 2nd respectively, while the duration of toothbrushing, the frequency and the methodology used are more attention paid to the group 1st. The use of electric toothbrush is more of groups 1st and 4th. Regular dental floss, interface brushes and mouthwash use don't differ significantly between groups. Oral hygiene trainings given by dentists are considered sufficient by group 2nd, but this rate is not considered enough by groups 3rd, 4th and 1st respectively.**Conclusion:** As a result, the oral hygiene habits described by the dentists are not adequately implemented by dentists and dental students. Statistically significant differences were found in the answers given to the questionnaires as a result of the research among the 4 groups.**Keywords:** Oral hygiene habits, questionnaire, research assistant dentist, dental student

PP 01-09**12 Month Follow-Up of The Restoration of The Primary Maxillar Incisor Teeth Conducted Under Anesthesia By Composite Short Post Technique****Salih Doğan, Gülce Coşar, Hüsnüye Gümüş***Department of Pediatric Dentistry, Faculty of Dentistry, Erciyes University, Kayseri, Turkey*

Aim: The evaluation of clinical and radiological success of 3, 6 and 12 months of short post restorations done with composites of overdose lost upper incisor teeth frequently encountered in young children under general anesthesia.

Material and Methods: Composite short restoration teeth conducted on 50 incisor teeth from 15 patient whose age range is 2 to 6, and whose primer maxillar incisor teeth showed excessive mass lose due to tooth decay were included in the study. Treatment of the patients was performed under general anesthesia, and after the canal treatment restoration was completed by placement of the light curing composite by incremental technique of the teeth attaching the matrix of the meba. After that, clinical and radiological follow-up was done.

Results: Clinical and radiologic success rates of treated teeth at 3, 6 and 12 months were 81.6%, 67.7% and 67.7%, respectively.

Conclusion: Nearly all of the cases that failed at the end of 12 months showed that the level of caries was at the gum level and that this technique was the most important criterion for success, it has been observed that success is associated with residual tooth structure and that cheap, fast and aesthetic restorations can be made in teeth with appropriate indications.

Keywords: Short post technique, composites, caries, maxillary incisor teeth

PP 01-10**Investigation of The Self-Reported Attitude of Dentists Towards Fluoride Applications****Mine Koruyucu¹, Sinem Birant¹, Hazal Özcan¹, Ceren İlisulu¹, Nural Bekiroğlu², Figen Seymen¹***¹Istanbul University, Faculty of Dentistry, Department of Pedodontics, Istanbul, Turkey**²Marmara University, Medical School, Department of Biostatistics, Istanbul, Turkey*

Aim: The purpose of this study is to determine the approaches of the dentist about fluoride applications among the preventive treatment options.

Material and Methods: The study was a questionnaire based cross-sectional survey including 20 items and divided into two sections and the participating dental practitioners were asked to answer and complete a questionnaire about: i) Dentists demographic datas: Gender, age, graduation year, graduated university, specialty, years in practice, working place ii) Dentists attitudes to prevention: Approach to preventive dentistry and use of fluoride applications. Data entry and analyses were performed using SPSS statistical software. Data were analyzed using frequency counts, percentages and Chi-square test.

Results: A total of 481 voluntary dentist (355 (73.8%) female; 126 (26.2%) male) responded. The sample consisted of 332 general dentist (69%), 149 specialist dentist (31%). 380 (79%) dentist were applying preventive applications. 452 dentists (94%) point out that fluoride is effective in preventing caries. 235 dentists (48.9%) are thinking that fluoride has a side effect. Statistically significant differences were found between female and male dentist according to the anti-caries affect of fluoride ($p=0.005$) and applying protective applications ($p=0.010$). Dentists over the age of 50 apply protective applications (66.7%) statistically significantly less than dentists in other age groups ($p=0.019$). General dentists (87.7%) reported that they were performing protective treatment than specialists ($p=0.0001$).

Conclusion: It was found that preventive practices are on the secondary plan for especially specialist dentist because of they have given priority to their speciality. Keeping up-to-date ongoing training and information about preventive practices will change the dentists approach to the preventive practices.

Keywords: Fluoride, preventive dentistry, dentist

PP 01-11**Investigation of Education Level of Clinical and Preclinical Students of Dental Faculty of Atatürk University About HIV and AIDS*****Okan Karalar, Nuran Yanıkoğlu****Department of Prosthodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey*

Aim: This study aims to evaluate the knowledge and attitudes on Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) of Atatürk University Faculty of Dentistry students. The aim of this descriptive study was to evaluate the knowledge and attitude of the third-year, fourth-year and fifth-year students (n=282) of Ataturk University Dentistry Faculty concerning HIV/AIDS.

Materials and Methods: A questionnaire including 10 questions was used to evaluate the dental students knowledge levels, awareness and attitudes towards HIV/AIDS (n:282). Pearson's Chi-square test was used for statistical data analysis. $P < 0.05$ was set significant. The questions were selected based on a review of previous studies. Data was collected from the students in face-to-face interviews.

Results: This study showed that clinical students do not have enough knowledge about AIDS. Though lack of knowledge HIV was found to be high among all participants, pre-clinic and fourth year students appeared to be less knowledgeable about HIV than fifth-year students.

Conclusion: It was concluded that most students have unsatisfactory knowledge on how HIV/AIDS is transmitted, and a lack of information and sources on HIV/AIDS was found to trigger inaccuracy. According to these findings, efficacious education programs should be prepared to establish positive attitudes to HIV/AIDS patients, especially for the preclinical students.

Keywords: AIDS, HIV, knowledge, questionnaire

PP 01-12**Inter- and Intra-Examiner Agreement of Occlusal Caries Assessment Using International Caries Detection and Assessment System*****R. Banu Ermis, Günseli Katirci****Suleyman Demirel University, Faculty of Dentistry, Department of Restorative Dentistry*

Aim: The aim of this in vitro study was to evaluate inter- and intra-examiner reliability of occlusal caries assessment using International Caries Detection and Assessment System (ICDAS-II).

Materials and Methods: The occlusal surfaces of 55 permanent molar teeth, varying from ICDAS scores 0 to 6 were examined by two experienced, trained and calibrated investigators. All visual examinations were conducted under standard conditions. Examinations were repeated after one week from the initial examination. Cohen's Kappa statistic was utilized to evaluate results of inter- and intra-examiner agreement.

Results: Inter-examiner agreement was found to be very good (Kappa values=0.81). Intra-examiner agreement was moderate for the both examiners (Kappa value of 0.55 for examiner 1 and Kappa value of 0.58 for examiner 2).

Conclusions: This study demonstrated very good inter-examiner reliability and moderate intra-examiner reliability for occlusal caries detection using the International Caries Detection and Assessment System (ICDAS-II).

Keywords: Caries, ICDAS, inter-examiner, intra-examiner, reliability

PP 01-13

Evaluation of Antibacterial Efficiency of Chlorhexidine Varnish and Fluoride Varnish on Biofilm: In-Situ**Burcu Koç Namazoğlu¹, Ferdiye Küçük², Seren Kaya¹, Firdevs Tulga Öz¹**¹Pediatric Dentistry, Ankara University, Ankara, Turkey²Pediatric Dentistry, Near East University, Nicosia, Cyprus**Aim:** This was to evaluate the efficiency fluoride(Duraphat®polish) and chlorhexidine varnish(Cervitec®Plus) on biofilm thickness and bacteria viability.**Materials and Methods:** 10 children aged between 11-14 were included in this study without any teeth loss on maxilla; 5 with high risk of caries (Group-1) and 5 without any carious lesions (Group-2). 3 specimens were embedded in buccal ridge of acrylic plaques prepared for maxilla. By using sectioning device specimens with a size of 2x3 mm were obtained from a bovine tooth and then sterilized. Participants were informed to carry plaques for 6, 24 and 48 hours. At the end of every interval the specimens were changed with others obtained from same bovine tooth. After these intervals Cervitec®Plus and Duraphat®polish were applied to 1st and 2nd specimens respectively. 3rd specimens were only rinsed by saline. Samples were evaluated by confocal laser scanning microscope after dying with ethidium bromide and fluorescent diacetate.**Results:** Biofilm thickness values of high caries risk group were higher when compared to low caries risk group and this was statistically significant (p<0.05). Thickness values increased statistically significantly by time (p<0.05). Microbial agents decreased significantly the viability of microorganisms on biofilm in every interval (p<0.05), with no change in thickness (p>0.05).**Conclusions:** It is concluded that due to antimicrobial efficiency and their effects on bacteria viability, chlorhexidine varnish and fluoride varnish, these agents can be used in preventive applications.**Keywords:** Chlorhexidine, fluor, confocal laser, biofilm

PP 01-14

Evaluation of The Relationship Between Pubertal Growth Spurt Periods and Two Dental Age Assessment Methods in Turkish Children Aged 8-13: Research Article**Sevcihan Günen Yılmaz¹, Mevlüde Polat², Münevver Kılıç³**¹Department of Oral And Maxillofacial Radiology, Faculty of Dentistry, Akdeniz University, Antalya, Turkey²Department of Orthodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey³Department of Pedodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey**Aim:** This study was targeted to investigate the probability of scoring the relationship between dental maturation and skeletal maturation without taking a radiogram outside of panoramic radiogram. The aim of this study was to detect provided that evaluation of dental calcification and comparison with skeletal maturity may be used among Turkish children.**Material and Methods:** Panoramic and hand-wrist radiographs of 215 patients (124 girls and 91 boys), with ages ranging from 8 and 13 years, were evaluated. Dental age assessments were detected by Demirjian and Nolla methods. The skeletal maturation was detected by Fishman method and bone age was detected according to the Greulich and Pyle atlas.**Results:** All teeth showed positive and statistically significant correlations, the highest correlation was between the mandibular second premolar calcification stages with hand-wrist maturation stages. According to both tooth age determination methods, mandibular second premolar was prominent in determining to the pubertal growth spurt stages.**Conclusion:** Dental calcification stages of the second mandibular premolar showed the highest positive correlation with the hand-wrist stages. Therefore, by looking at the dental development of these teeth, children with a certain age range may have knowledge of the pubertal growth spurt period.**Keywords:** Dental calcification stages, hand-wrist radiograms, panoramic radiography, pubertal growth stages

PP 01-15**Determination of the State Anxiety Levels in 9-12 years-old Children Who Applied to The Department of Pediatric Dentistry in the Faculty of Dentistry*****Sevim Ipekten¹, Canan Nur Karabey****Faculty of Dentistry Ataturk University, Maxillofacial Surgery, Erzurum***Aim:** The aim of this study is to determine the state anxiety levels of 9-12 years-old children presented at the department of pediatric dentistry in Ataturk University's Faculty of Dentistry.**Material and Methods:** The study consists of 55 girls (53.4%) and 48 boys (46.6%) with a median age of 10.49±1.34 (min: 9, max: 12). The Data were obtained through survey forms and State-Trait Anxiety Inventory-STAI (Spielberger) and they were assessed in SPSS 16.0 with percentage distribution, variance analyses and t tests.**Results:** When the demographics of the participant patients were examined we found that; 12% was under 12 years old, 53.4% was girl, 85.4% had non-working mothers, 36.9% with high school-graduate fathers, 90.3% had working fathers, 48.5% sometimes delicately brush their teeth, 71.8% used mouthwash, 57.3 % established routine morning and evening brushings, 72.8% never visited the dentist. In the statistical analyses, no difference has been found between the work status of the parents and the anxiety levels of the children ($P>0.05$). No statistically significant difference has been found between the first dental visits and the anxiety levels ($P>0.05$).**Conclusion:** Making the children to keep regular dental appointments may positively contribute to diminishing the next generations' dental treatment anxieties.**Keywords:** Dental anxieties, oral and dental health, state anxiety**PP 01-16****Comparison of Knowledge Levels on Oral Health of The First and Five Years Students in Faculty of Dentistry, Ataturk University*****Seyit Bilal Özdemir, Nurcan Özakar İlday****Department of Restorative Dentistry, Ataturk University, Erzurum***Aim:** In this questionnaire study, it was aimed to determine the level of knowledge about oral and dental health of 1st and 5th year students in the faculty of dentistry and compare them according to sex and Class.**Materials and Methods:** Female and male students randomly selected from Atatürk University Dentistry Faculty 1st and 5th grade were included in the questionnaire. (n = 80) A questionnaire consisting of 25 multiple-choice questions was administered to the students to determine their oral and dental health attitude behavior and knowledge levels. The obtained data were evaluated statistically by Pearson chi-square test.**Results:** Of the 160 students in the study, 98 are girls and 62 are boys. It was determined that the frequency of female students brushing teeth and going to dentist was higher than male students. According to the statistical results, 5th grade students according to the first grade students think that they use ideal toothpaste, more importance to interface cleanliness, more frequent and regular dental control, more effective toothbrushing with the right technique and more information about preventive measures ($p < 0.05$). However, fifth grade students were found to use more cigarettes ($p < 0.05$).**Conclusion:** Dental health education and training process increases awareness of oral and dental health and knowledge level from first to fifth year.**Keywords:** Oral health, dental health, dentistry students

PP 01-17

Incidence of Developmental Defects of Enamel in Children with Chronic Skin Conditions: A pilot study**Eda Okutan¹, Deniz Yücelten², Ali Mentş¹**¹*Pediatric Dentistry, Marmara University, Istanbul, Turkey*²*Department of Dermatology, Marmara University, Istanbul, Turkey*

Aim: The aim of this pilot study was to investigate the incidence of the developmental enamel defects in children attending to dermatology clinics for different skin conditions.

Material and Methods: Sixty-five pediatric patients (25 girls and 40 boys; between 7 and 14 ages) who attended to Marmara University Faculty of Medicine Department of Dermatology with the complaint of various skin diseases were examined intra-orally for enamel developmental defects. All patients' medical history was taken by staff member of the department. Dental examinations were made in day light and photographs were taken. DDE index was used to Classify enamel defects.

Result: Of the 65 patients 20(30.7%) had atopic dermatitis, 2(3%) ichthyosis, 8(12.3%) psoriasis, 2(3%) xeroderma pigmentosum, 3(4.6%) ectodermal dysplasia, 7(10.7%) nevus, 2(3%) morphea, 2(3%) papillon lefevre, 4(6.1%) vitiligo, 4(6.1%) epidermolysis bullosa, 1(1.5%) albinism, 1(1.5%) urticarial vasculitis, 1(1.5%) lichen planus, 1(1.5%) lichen striatus, 1(1.5%) mastocytosis, 1(1.5%) candidiasis, 1(1.5%) hemangioma, 4(6.1%) unknown skin conditions. Thirty five percent of the patients had developmental defect of enamel which was 5(21.7%) atopic dermatitis, 4(17.3%) psoriasis, 4(17.3%) epidermolysis bullosa, 2(8.6%) morphea, 2(8.6%) papillon lefevre, 1(4.3%) ichthyosis, 1(4.3%) ectodermal dysplasia, 1(4.3%) lichen planus, 1(4.3%) candidiasis, 1(4.3%) vitiligo, 1(4.3%) hemangioma.

Conclusions: Owing to the high frequency of enamel defects in our study population an evaluation for oral health can be advised for children with skin diseases and it should included in their medical care.

Keywords: Developmental defects of enamel, hypomineralization, hypoplasia, skin diseases

PP 01-18

Oral Hygiene Habits of Children at The Beginning of Mixed Dentition Period and The Role of Their Parents**Burcu Güçyetmez Topal¹, Zuhal Kırziođlu²**¹*Department of Pediatric Dentistry, Faculty of Dentistry, Afyon Kocatepe University, Afyonkarahisar, Turkey*²*Department of Pediatric Dentistry, Faculty of Dentistry, Süleyman Demirel University, Isparta, Turkey*

Aim: In this study, it was aimed to evaluate the oral hygiene habits of children at the beginning of mixed dentition period and the role of their parents in these habits.

Material and Methods: Two hundred healthy, 6-7 aged of children, who have entered the mixed dentition period yet participated in the study. Children's dft index values were recorded, dental plaque quantity was assessed according to the plaque index criteria of Silness & Löe using TriPlaque ID Gel®. Parents filled out questionnaire forms about oral hygiene habits. Statistical analysis was done using SPSS.

Results: In the study, 105 girls (52.5%) and 95 males (47.5%) were included. Mean dft values of children were 5.35 ± 3.85 , mean plaque indices were 1.90 ± 0.83 . There was no statistically significant difference according to sex and age. 22.5% of the children didn't brush their teeth at all, 1.5% didn't even have a toothbrush. It was learned that 29.5% of the children received parental help during brushing. 55.5% of the parents brought their children to the dentist only when teeth had pain. It is found that the most children who didn't brush their teeth are the children of the mothers with the primary education. As the number of siblings increased, the proportion of children who didn't brush their teeth increased.

Conclusion: It is suggested that the education for society should be given priority for determining the knowledge and practices of children and their parents regarding oral and dental health, correction of false information, correct habits can be transformed into sustainable applications.

Keywords: Oral and dental health, oral hygiene, mixed dentition

PP 01-19**Treatment of a Patient With Severe Crowding with Removable Appliance and Extraction: A Case Report**

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Introduction: Patients with severe crowding are usually given the indication of extraction as an option of orthodontic treatment. After tooth extraction, it may be possible to improve the tooth alignment spontaneously without applying orthodontic force to the teeth. This improvement sometimes removes the active orthodontic treatment and sometimes it provides treatment benefit by decreasing the duration of treatment.

Case Reports: A 10-year and 10 month old male patient applied to our clinic with the chief complaint of his upper canine teeth were not erupted. Findings of clinical, cephalometric and model analysis of the patient; according to the Hayce-nance analysis the upper and lower jaws space requirements are 15.7 mm and 13.3 mm respectively, lower canine teeth is outside of the arch at the vestibule, upper canine impacted bilaterally, hyperdivergent growth pattern(SN-GOGN; 43.3). As a treatment plan for the patient, 4 premolar teeth extraction with fixed mechanics was determined. As a beginning the first premolar teeth were extracted and fixed treatment was not started and the lower and upper removable appliances were made. At the end of the 7-month follow-up, the upper-canine teeth were spontaneously erupted without any orthodontic force, the lower canine was placed in the arch with driftodonty.

Conclusion: In the patient with severe crowding, the teeth was extracted and waited with the removable appliances and spontaneous improvement of the tooth alignment was provided. In this way the duration of active orthodontic treatment is shortened and the complications that may occur during active treatment are reduced.

Keywords: Severe crowding, nonextraction treatment, driftodonty

PP 01-20**Use of Soft Lining Materials in The Irregular Alveolar Crests: A Case Report**

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Introduction: Soft lining materials are soft polymers applied to the tissue surface of the prosthesis in order to reduce and evenly distribute the occlusal forces to the mucosal and alveolar tissues under the prosthesis. Different types of soft lining materials, which are used intermittently and permanently according to different indications, are found in clinical applications. Acrylic and silicone-based soft lining materials for permanent use can be applied directly in the clinic as well as in the laboratory.

Case Report: In this case report, the rehabilitation of the total edentulous patient who applied to our clinic with soft lining material supported denture is described.

Conclusions: Soft lining materials provide an opportunity to more protective treatment compared to surgery in initial treatment of presence of irregular alveolar crests.

Keywords: Alveolar Crest, denture, soft lining material

PP 01-21**A Comprehensive Treatment Approach to an Immature Permanent Molar: A Case Report*****Avşar Öztürk, Senem Selvi Kuvvetli****Department of Pediatric Dentistry, Faculty of Dentistry, Yeditepe University, İstanbul, Turkey*

Introduction: Computer-aided design (CAD) and computer-aided manufacturing (CAM) have become an increasingly popular part of pediatric dentistry. CAD/CAM offers a restoration method that decreases the risk of human error and provides highly aesthetic outcomes. This case report presents a comprehensive treatment approach to an immature permanent first molar.

Case Report: A-10-year-old male patient referred to Yeditepe University, Faculty of Dentistry, Department of Pediatric Dentistry with chief complaint of dental caries. Clinical and radiographic examination showed deep dentinal caries with excessive crown damage on the lower left first permanent molar. First endodontic treatment was made with apexification and root canal therapy. Then periodontal treatment was made with gingivectomy by Er:YAG laser therapy. After endodontic and periodontal treatment indirect composite onlay restoration was made by CAD/CAM system.

Conclusion: The combined use of different treatment modalities in the diagnosis and management of the tooth with excessive crown damage is important to prevent any further complications like tooth loss. Despite the high cost of treatment, this type of restoration should be considered if the retained tooth is expected to maintain functionality over the long term.

Keywords: CAD/CAM, gingivectomy, immature molar, pediatric dentistry

PP 01-22**Prosthetic Rehabilitation of Reduced Occlusal Vertical Dimension Due to Severe Wear and Loss of Posterior Teeth: A Case Report*****Ayfer Atamer, Esra Bilgi Özyetim, Tonguç Sülün, Belkıs Gülsen Bayraktar****Department of Prosthodontics, School of Dentistry, University of Istanbul, Istanbul, Turkey*

Introduction: Many situations indicating full mouth rehabilitation with severely worn dentition present with the challenge of a loss of restorative space. Extraoral and intraoral examinations are important when determining the occlusal vertical dimension (OVD). The evaluation of the vertical dimension at rest and in occlusion is essential. In the literature, a lot of techniques have been proposed to overcome OVD loss.

Case Report: In this case report, functional and aesthetics requirements of a patient who has exhibited with the loss of occlusal vertical dimension was obtained via full mouth rehabilitation.

Conclusion: A comprehensive treatment planning is needed for OVD. However, these techniques should be discussed to increase OVD because of their lack of reliability and consistency. Therefore, increasing OVD should be determined on the basis of the dental restorative needs and aesthetic demands.

Keywords: Full mouth rehabilitation, vertical dimension, worn dentition

PP 01-23**Esthetic Approaches to Anterior Region Direct Composite Laminate Veneers: Case Reports*****Ayşenur Güngör Borsöken, Derya Sürmeliöğlü****Restorative Dentistry, Gaziantep University, Gaziantep, Turkey*

Introduction: More conservative approaches are preferred to solve the esthetic problems nowadays. Adhesive applications commonly used in dentistry in the treatment of color defective teeth increase the interest in this practice because it is a much more conservative and cheaper application than prosthetic dentistry. Direct composite veneer were applied to our patients who came to the clinic with aesthetic complaints at anterior region and they were followed up at 6 month recalls in our clinics.

Case Report: First, the patient's restorations were removed and any caries lesion was cleaned. Then acid etching (Etching Gel, Kerr, USA), bonding agent (primer&bond universal, Dentsply Sirono) and composite resin material (G-Aenial, GC EUROPE) were applied in turn to the cavities prepared, according to the manufacturers' s instructions. Second patient suffered from anterior diastema. Teeth have been cleaned and the color selection made, isolation of the teeth was done. Then acid etching, bonding agent were applied the same as first patient's. Composite resin material (Essentia, GC EUROPE) were applied in turn to the cavities prepared, according to the manufacturers's instructions. Abrasive discs (Sof-Lex, 3M ESPE) was using for contouring and finishing. Postoperative control results obtained at 6th month.

Conclusion: In clinical evaluation of the patients coming control afeter 6 months, the were no evidence of any fracture and discoloration. The patients were satisfied of these treatment.

Keywords: Anterior direct composite, laminate veneers, esthetics approaches

PP 01-24**Revascularization Treatment in Immature Permanent Molar Teeth with Necrotic Pulp and Open Apex: Case Series*****Bahar Zincir, Seren Kaya, Betül Ursavaş, Levent Özer****Pediatric Dentistry, Ankara University, Turkey*

Introduction: Treatment of an immature permanent tooth with necrotic pulp and open apex is a special challenge to the pediatric dentists. Apexification with calcium hydroxide and MTA barrier technique fails to induce continued root maturation which makes the tooth susceptible to root fracture. Hence, an ideal outcome for such a tooth should be revascularization of pulp like tissue into the root canal capable of continuing normal root maturation. The purpose of this case series was to describe successful revascularization treatment of an immature upper and lower molar teeth with necrotic pulp and open apex in between 8 and 10 year-old child patient.

Case Series: Six clinically and radiographically diagnosed necrotic immature permanent molar teeth were treated using revascularization treatment. The therapeutic protocol involved accessing the pulp chamber; irrigating copiously with NaOCl; applying a twomix antibiotic paste as intracanal dressing; then provisionally sealing it. After 3 weeks, the canal was cleaned and the apex irritated with a size 15 K-file to induce blood that would serve as a scaffold for pulp revascularization. MTA was used to seal the chamber before final obturation. Patients were recall at 3, 6 and 12 month. The teeth were asymptomatic with no sensitivity to percussion or palpation. Radiographic examination demonstrated continued thickening of root canal walls, root lengthening and apical closure.

Conclusion: Revascularization treatment with MTA showed clinical and radiographic success in immature permanent tooth. The successful outcome of this case suggest that MTA is reliable and effective for endodontic treatment in the pediatric dentistry.

Keywords: Revascularization, immature permanent tooth, stem cell

PP 02-25

Aesthetic Rehabilitation of Dental Fluorosis with Direct Composite Veneers: A Case Report**Zuhal Yıldırım, Başak Gözüyeşil, Oya Şeker, Hazal Deniz Köse***Department of Restorative Dentistry, School of Dental Medicine, Mustafa Kemal University, Hatay, Turkey*

Introduction: Dental fluorosis is a anomaly caused by excessive intake of fluoride during the development of teeth. The degree of hypomineralization varies according to the amount of received fluoride that is rated as mild, moderate and severe. This case report presents the esthetic rehabilitation of severe dental fluorosis by direct composite laminate veneer technique.

Case Reports: A 24-year-old male patient was admitted to our clinic due to aesthetic problems concerning his teeth. Clinical and radiographic examination revealed that the patient had severe fluorosis. Periodontal treatment was completed. It was decided to apply direct composite laminate veneers for maxillar anterior teeth no. 11, 12, 13, 21, 22, 23 and mandibular anterior teeth no. 32, 33, 42, 43. Before the laminate preparation, gingival retraction was done. Vestibule enamel surface of teeth were prepared with diamond bur under water cooling for 0.5 mm depth for composite veneers. Aproximal contacts were preserved. Direct composite (Clearfil Majesty es-2, Kuraray Noritake, Japan) laminate veneers were applied using total-etch technique (Single-Bond 2, 3M ESPE, USA). Finishing and polishing procedures were performed with aluminium oxide abrasive discs (Super-Snap Rainbow Technique Kit, Shofu Dental GmbH, Germany). The patient were observed clinically after restorative procedures completed.

Conclusion: Fluorosis can affect teeth and cause problems on aesthetic. Direct composite laminate veneer restorations exhibit clinically acceptable aesthetics, physical and mechanical properties and marginal integrity. Also, they are conservative and lower cost treatment option compared to indirect restorations.

Keywords: Fluorosis, laminate veneer, aesthetic

PP 01-26

Custom Mouthguard Applications in Prevention of Sport Injuries: A Case Report**Bilal Holoğlu, Işıl Sarıkaya***Gaziosmanpaşa University Faculty of Dentistry Department of Prosthodonti, Tokat, Turkey*

Introduction: The essential function of mouthguards is protection against the effects of injuries sustained during sports activities. It has been aimed to decrease the applied force to the maxillofacial region with using mouthguard in sport activities. This purpose will be successfully achieved if appropriate materials ensuring sufficient reduction of the injury force are used for mouthguard fabrication. Therefore, mouthguards are made from different materials in accordance with the sports branch and the wearer. Nowadays polyamide resin materials are used in prosthetic application due to their low elasticity module. One of the important factors is the low elastic modulus of the materials when the incoming forces are distributed without stress in the material.

Case Reports: In this case report, information about clinical and laboratory steps of mouthguard application of polyamide resin material to teakwondo sportsman who applied to our clinic was given.

Conclusions: Polyamide resins are an alternative material that can be safely used in making mouthguards. Use of polyamid resin mouthguards during sports activities is protective against dental trauma.

Keywords: Mouthguard, polyamide resin, sport dentistry

PP 01-27

Multidisciplinary Treatment Approach to A Maxillary Central Incisor Tooth Which Is Impacted Due to Mesiodens***Buse Tansu Gündoğan, Ali Recai Menteş, Mehmet Sertaç Peker****Paediatric Dentistry, Faculty of Dentistry, Marmara University, Istanbul, Turkey*

Introduction: Mesiodens is a supernumerary tooth that is present in the midline of the maxilla between the two central incisors. Mesiodens usually stay impacted. It is important that mesiodens may effect adjacent incisor teeth's position or eruption. In this case report it is presented a multidisciplinary approach for treatment of mesiodens which caused impaction of a permanent central incisor.

Case Report: A 12-year-old, systemically healthy girl, referred with delayed eruption of the permanent central maxillary incisor #11, #21 was present. The mesiodens diagnosed with panoramic radiography. To examine the exact position of mesiodens we applied CT and it has seen that she had 2 mesiodenses in the buccal and the lingual position of #11. First nance appliance has been applied to protect #11's area and maxillary teeth have been bonded braces for leveling. After CT we decided to keep the tooth in the arch as #11, the other two teeth has been extracted surgically. We waited for eruption of #11 but 3 months later there were no movement. So it's buccal surface has been exposed with diode laser and bonded a brace. #11 erupted with orthodontic force in one year. The tooth had an atypical and irregular buccal surface. After debonding of the braces an esthetic restoration has been done with composite.

Conclusion: In this case report we have tried to present that how a multidisciplinary approach helps to a maxillary central incisor which is impacted due to mesiodens

Keywords: Mesiodens, orthodontics, diode laser, multidisciplinary treatment

PP 01-28

Treatment of Implant Abutment Fracture- A Case Report***Zeynep Yeşil Duymuş¹, Firas Suleyman², Cenk Fatih Canakç³****¹Department of Prosthodontics, Faculty of Dentistry, Recep Tayyip Erdoğan University, Rize, Turkey.**²Department of Prosthodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey.**³Department of Periodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey.*

Introduction: Implant treatment is frequently used and successful treatment option for single, partial and total tooth deficiencies combined with developing technology. Although high success rates are reported, mechanical and biological complications may occur early or late. The structure of the implant, primer stability, bone quality and health status of the patient are among the factors affecting the success of the implant. The studies that followed the long-term success of the implant indicated that many complications will occur. These complications may include fracture of implant parts, breakage of restorations, loosening or fracture of the abutment screw, loss of bone and loss osseointegration. The purpose of this clinical report is to present prosthetic rehabilitation of the one patient who found a broken abutment.

Case Report: A 40-year-old male patient was applied to department of prosthodontics with the complaint of implant prosthesis. It has been determined that the hexagonal portion (hex) of the abutment is fractured on the intraoral examination performed. After removal of the broken abutment piece, the prosthetic restoration was completed by performing routine procedures.

Conclusions: Removing the broken part is very difficult and time-consuming procedure.

Keywords: Abutment fracture, implant, prosthetic rehabilitation

PP 01-29

Esthetic Enhancement of Patient with Diastema by Metal Ceramic Restoration***Delal Bozyel, Simge Taşar Faruk****Department of Prosthodontics, Near East University, Nicosia, Turkish Republic of Northern Cyprus*

Introduction: Nowadays, with the increase of progress in dental materials, esthetic concerns have become more popular among patients. Although composite restorations and porcelains are frequently used in esthetic areas, metal supported ceramic crowns are also used due to economic reasons. In this case, diastema in the anterior region were treated with metal supported ceramic crowns according to patient's expectations.

Case Reports: A 47 year old male patient was referred to the Department of Prosthodontics, Near East University, Cyprus for esthetic complaint. The patient was unhappy with the appearance of his anterior teeth and his smile. Clinical examination revealed the Angle's Class III occlusal Classification of the patient. According to the clinical and radiographic examination treatment options were described to patient. Composite restoration is contraindicated for the treatment of diastema. So, this treatment option was eliminated. In addition, patient did not accept the other treatment option which was orthodontic treatment. Metal supported ceramic crowns were planned for the #11, #12, #13, #21, #22, #23, #31, #32, #33, #41, #42, #43 numbered teeth. Considering the expectations of the patient, treatment was performed according to esthetic and phonetic concerns.

Conclusion: Diastema is an oral problem that is frequently treated due to the esthetic concerns of patients. Treatments with metal supported ceramic crowns is a good and economical alternative with satisfying results both for patients and dentists.

Keywords: Diastema, esthetic dentistry, metal ceramic restorations

PP 01-30

Intentional Replantation of a Tooth with Poor Prognosis Because of a Deep Periodontal Defect and Broken Instrument: A Case Report***Ebru Tepecik¹, Ömer Faruk Yıldırım², Kezban Meltem Çolak¹****¹Atatürk University, Faculty of Dentistry, Department of Endodontics, Erzurum, Turkey**²Atatürk University, Faculty of Dentistry, Periodontology Department, Erzurum, Turkey*

Introduction: Aim of this presentation is to demonstrate the successful treatment of a tooth with deep periodontal defect and broken endodontic instrument.

Case Report: A +28 year old female patient referred to Atatürk University Faculty of Dentistry Periodontology Department, complaining of bleeding on brushing and mobility of lower first molar tooth. Periapical radiography revealed mesial deep bone defect. Clinical examination showed that the patient had a deep periodontal pocket (10 mm) on probing. First phase treatment was performed in periodontology clinic. There was no sign of healing in mobility and bone defect after repeated treatments. The patient was consulted to department of endodontics whether there was any endodontic problem. As pulp vitality tests showed that the tooth was not vital, root canal treatment was planned. The file was broken during endodontic treatment. The broken file was attempted to retrieve but it could not be succeeded. The patient was informed about poor prognosis and before extraction intentional replantation was offered. After patient's consent, the tooth was extracted. While the socket was thoroughly curretted by the periodontologist, retrograd cavities were prepared and filled with MTA by the endodontist. Infected cement tissue was totally removed. The tooth was soaked with tetracycline solution. Then the tooth placed to its socket and splinted for two weeks. Post operative course was uneventful. After 6 months, radiographic examination revealed new bone regeneration, the mobility was not observed.

Conclusion: Intentional replantation is a viable treatment that can be performed to hopeless teeth as an alternative to extraction.

Keywords: Intentional replantation, MTA, broken instrument

PP 01-31**Endodontic treatment of a traumatized tooth with double cervical fracture line: A case report*****Ebru Tepecik¹, Levent Kavrama², Kezban Meltem Çolak¹****¹Atatürk University, Faculty of Dentistry, Department of Endodontics, Erzurum, Turkey**²Atatürk University, Faculty of Dentistry, Periodontology Department, Erzurum, Turkey*

Introduction: Aim of this case report is to demonstrate treatment of lower left incisor tooth with horizontal cervical root fracture.

Case Report: A 23 year-old male patient referred to our clinic due to trauma which occurred by unintentional movements at sleep. On clinical examination, the lower left central incisor was tender on palpation and it was mobile. Radiographic examination revealed that there were two fracture line beneath the CEJ. The patient was informed about poor prognosis because of unfavorable fracture line and periodontal problem. Because of the close proximity of the fracture lines, performing endodontic treatment and fixing the fractured segments with post was thought to be an alternative to extraction. Under local anesthesia, the tooth splinted to adjacent teeth and coronal access cavity was prepared. Working length was determined by apex locator and verified by radiograph. The root canal prepared using ProTaper next instrument up to F3 size. After chemomechanical preparation, apical part of canal filled with AH plus and gutta percha. Coronal part of canal prepared for post placement. Fiber post placed into the canal using dual cured resin cement. The patient referred to periodontology department for periodontal treatment. Two weeks later, splint was removed. 6 months later the tooth was asymptomatic and mobility was in the range of physiologic limits.

Conclusion: Despite of follow up is short time period, new bone regeneration which is a sign of healing is evident in this case. In cervical fractures, even in severe cases, conservative approach is a better treatment alternative.

Keywords: Cervical root fracture, fiber post, trauma

PP 01-32**Oral Squamous Cell Papilloma: A Case Report*****Eda Özdemir¹, Behiye Bolgüel¹, Burak Doğan²****¹Department of Pediatric Dentistry, Mustafa Kemal University Faculty of Dentistry, Hatay, Turkey**²Department of Periodontology, Mustafa Kemal University Faculty of Dentistry, Hatay, Turkey*

Introduction: Squamous cell papilloma is known as the benign proliferation of multilamellar epithelium associated with the human papilloma virus. The purpose of this case report is to demonstrate the results of the surgical approach for the treatment of oral squamous cell papilloma.

Case Report: A ten-year-old otherwise healthy patient was admitted to department of pediatric dentistry with the complaint of localized gingival hyperplasia. Apedicular, papillary, edematous and red coloured lesion was detected in the vestibule surface of the left upper central tooth with the history of about 18 months. Periapical radiographs indicated intact alveolar bone. One month after phase 1 periodontal treatment, the lesion was excised under local anesthesia. Histopathologic examination revealed squamous cell papilloma diagnosis. The patient was maintained for 4 months and no recurrence was observed.

Conclusion: Surgical excision following initial periodontal treatment presents successful result for the treatment of oral squamous cell papilloma. The patient's compliance to the maintaining protocol reduces the probability of the lesion recurrence.

Keywords: Oral squamous cell papilloma, pediatric dentistry, gingival hyperplasia

PP 01-33**Restorative Approaches in Orthodontics: Two Case Reports*****Elif Aybala Oktay, Serpil Karaođlanođlu, Ertürk Bilgeç****Department of Restorative Dentistry, University of Health Sciences, Gulhane Faculty of Dentistry, Ankara, Turkey.*

Introduction: Patient role cannot be neglected in aesthetic solutions. Planning the most appropriate treatment option requires for an interdisciplinary study, as well. We aimed to share the results of our patients leading our study and the aesthetic results, as well.

Case Reports: As our first case 14-year-old female patient referred to our clinic with the complaint of crowded teeth. In the examination, it was detected that the patient presenting with anterior crowded teeth also had smaller sized mesiodistal in upper lateral teeth. In the measurement both laterals were detected to have 5.5 mm mesiodistal sizes. Due to few crowded teeth, it was decided to correct the malocclusion with fixed method without extraction of teeth. With 18-month lasting treatment, 1 mm cavity was formed up in the mesial section of lateral teeth. These cavities were filled with composite laminated veneer. During this procedure, prior to preparation A2 colored composite (Herculite XRV, Kerr, Italy), 37% orthophosphoric acid (Alpha Etch Jel, Brazil) and bonding (Optibond, Kerr, Scafati, Italy) were applied. As our second case, a 23-year-old female patient who refused orthodontic treatment option to correct extensive crowded teeth was assessed. And her aesthetic expectation was met with laminated veneer by using single session A2 colored composite (Tokuyama Estelite, Japan), 37% orthophosphoric acid (Alpha Etch Jel, Brazil) and bonding (Tokuyam Bond Force II, Japan).

Conclusion: Restorative dental treatment met the expectations of both patients accepting and refusing orthodontic treatment. Patient expectation is one of the leading parameters requiring for multidisciplinary methods.

Keywords: Dental veneers, esthetic, restorative dental treatment

PP 01-34**Treatment of Maxillar Lateral Diastemas with Direct Resin Composite Restorations After Orthodontic Treatment: Two Case Reports*****Elif Nihan Küçükyıldız, Burak Dayı****Inonu University, Faculty of Dentistry, Department of Restorative Dentistry, Malatya, Turkey*

Introduction: Diastema is an aesthetic problem due to spaces or differences between teeth sizes. Desired aesthetic results may not be obtained as a result of some orthodontic treatments, as a result of which diastemas may remain between the teeth. Direct resin composite restorations are conservative and are a low cost treatment option for the closure of diastemas between the teeth.

Case Reports: Case 1: A 14 year old male patient who had an orthodontic treatment applied to our clinic to rectify the diastemas in the upper lateral incisor teeth. Case 2: A 23 year old woman patient with an orthodontic treatment applied to our clinic for closing diastemas in the tooth #12 and for build up in #22. She was also complaining about the fracture in her #21. The bevel was made at the enamel surfaces of tooth #21. The teeth were etched with a 37% orthophosphoric acid (Etch Royal; Pulpdent, USA) and a self-etch bonding agent (Clearfil Universal Bond; Kuraray, Japan) was applied without any preparation on the enamel surfaces. In the first case teeth were restored with the composite resin (Herculite Classic A2; Kerr, Italy) and in the second case teeth were restored with the composite resin (Herculite Classic A1; Kerr, Italy) with layering technique. Finally, the restoration surfaces were polished with finishing discs (OptiDisc; Kerr, Switzerland).

Conclusions: Direct composite restorations are a conservative treatment method for the treatment of irregularities caused by tooth shape and size anomalies during or after the cases where the orthodontic treatment does not provide anterior region esthetics.

Keywords: Diastema closure, direct composite, esthetic

PP 01-35**Early Diagnosis and Extraction of Impacted Mesiodens in a Young Children: A Case Report*****Esra Aşçı¹, Elif Kardeş¹, Gelengül Urvasızoğlu², Sera Şimşek Derelioğlu¹, Taşkın Gürbüz¹***¹*Department of Pediatric Dentistry, Faculty of Dentistry, Ataturk University, Erzurum, Turkey*²*Department of Oral Maxillofacial Surgery, Faculty of Dentistry, Ataturk University, Erzurum, Turkey*

Introduction: Mesiodens teeth are often diagnosed by the complications they cause, such as the ectopic eruption of the permanent central incisors. Since there are not enough clinical studies regarding removal of early diagnosed mesiodens teeth, the debates on the timing of removal of these teeth have still been continuing. While some researchers advocate early diagnosis and extraction as the best treatment option to prevent complications of the permanent incisors such as ectopic eruption, diastema or crowding, other researchers advocate the removal of mesiodens and subsequent orthodontic treatment after the permanent teeth completed root formation.

Case Reports: 6 years old boy admitted to Ataturk University, Faculty of Dentistry, Pediatric Dentistry Department. His mesiodens was diagnosed incidentally by an orthopantomography that was taken as routine examination. In this case report, the evaluation of the root development of central incisors 6 years after removal of the mesiodens under general anesthesia was reported.

Conclusion: In the evaluation root development and periodontal status were found to be completely normal.

Keywords: Early diagnosis, extraction time, mesiodens

PP 01-36**Interceptive Treatment Approach In Anterior Open-Bite Patient Due to Tongue Thrust: Case Report*****Feyza Holoğlu, Nesime Özdemir, Sibel Akbulut, Fatih Çelebi, Ali Altuğ Bıçakçı****Department of Orthodontics, Faculty of Dentistry, Gaziosmanpaşa University, Tokat, Türkiye*

Introduction: Interceptive approaches prior to active orthodontic treatment either reduce the need for active treatment or reduce the severity of anomaly, shortening the duration of active treatment. These approaches, which are usually performed in the juvenile period, can sometimes be performed in the adolescence period when the permanent dentition is complete.

Case: A 14 years and 4 months old male patient with the complaint of the spaces between the upper front teeth and the overjet referred to our clinic. As a results of clinical, cephalometric and model studies; simple tongue thrust, maxillary polydiastema, reduced overbite (-1mm), increased overjet (+7mm), increased lower-upper incisor axis inclinations (95.7°-113.9°), hyperdivergent growth pattern (SN-GoGn 44.1°). The patient was planned to have a removable tongue cribs which is a habit-breaking appliance, and nonextraction fixed orthodontic treatment afterwards. As the first phase, the patient was applied a removable tongue habit appliance and followed up for 1 year and 3 months. At the end of the treatment, the tongue thrust of the patient was ended. In our findings, we found normal adult swallowing, well-aligned teeth in the upper and lower arch, increased overbite (+1mm), decreased overjet (+4mm), decreased lower and upper incisor axis inclinations (94°-108°), reduced vertical dimension (SN-GoGn 42.4°).

Conclusion: Simple interventions before active treatment provide material and spiritual advantages. After the use of appliances, active treatment was not required for the patient who had planned fixed treatment and both skeletal and dental improvements have been achieved with a simple habit breaking device.

Keywords: Tongue thrust, anterior open bite, habit breaker

PP 01-37**Conservative Management of an Ectopically Erupting Permanent Maxillar Molar: A Case Report****Dicle Aksakal, Gülsevım Usta, Gamze Aren***Istanbul University, Faculty of Dentistry, Pediatric Dentistry, Istanbul, Turkey*

Introduction: Ectopic eruption, a problem defining the eruption of a permanent tooth into an atypical position, usually diagnosed from routine examination because it is asymptomatic. Lack of timely intervention may cause loss of the primary second molars and space loss as the permanent molar erupts mesially. The aim of this case report is describe the conservative management of ectopically erupting first molar by the use of elastic separators.

Case Report: A seven-years old boy referred to the Department of Pediatric Dentistry, Istanbul University fot initial examination. Intraoral examination revealed ectopic eruption of maxillary first permanents molars and bilateral posterior cross-bite. Radiographic examination showed moderate root resorption of the second primary molars. Treatment plan involved the use of elastomeric separators to move the ectopically erupting teeth away from the primary molars and slow expansion of the maxilla with removable appliance. 1 year follow-up showed that both upper permanent first molars are erupted and in occlusion, primary molars are asymptomatic.

Conclusion: Early diagnosis and treatment are essential to prevent premature loss of primary tooth due to root resorption and mesial drift of permanent molars in order to avoid future occlusal problems. When the impacted molar is clinically accessible, several types of separation can be used for the treatment. With reciprocal anchorage, either a brass ligature, a spring-type deimpactor or an elastic separator can be used.

Keywords: Ectopic eruption, elastic separator, expansion

PP 01-38**Cleidocranial Dysplasia: A Case Report with Clinical and Radiographic Findings****Zehra Beyza Erel, Gülsüm Duruk***Inonu University Faculty of Dentistry, Pediatric Dentistry, Malatya, Turkey*

Introduction: Cleidocranial dysplasia (CCD) is a rare congenital disorder. General features of this disorder involve clavicular defect, late fontanelles closure, enlarged skull, retained primary teeth, impacted permanent and supernumerary teeth.

Case Reports: A 7½ year-old female patient applied to the Department of Pedodontics at Inonu University with multiple decayed teeth. There was no family history of vertical or horizontal inheritance but of consanguineous marriage. She has no medical problem except this syndrome. In the orthopantomograph and computed tomography, the number and the location of the supernumerary teeth was determined. The parents and patient were informed and the patient's fillings were performed. Since there were so many supernumerary teeth in the jaw, the patient has still been followed up for serial extraction according to the eruption time of the supernumerary teeth.

Conclusions: For CCD patients, it is very important to decide the detection of supernumerary teeth and timing of teeth extraction in terms of jaw development. Dentists should pay more attention to that.

Keywords: Cleidocranial dysplasia, Supernumerary tooth, Clavicular defect

PP 01-39

Gingival Recontouring and Closing Diastemas with Direct Composite Buildups: A Case Report**Oya Şeker, Hazal Deniz Köse, Zuhal Yıldırım, Başak Gözüyeşil***Department of Restorative Dentistry, Faculty of Dentistry, Mustafa Kemal University, Hatay, Turkey*

Introduction: Tooth size, shape, structure and like the others in the anterior region of mouth are major esthetic problems for patients. In this case report, the treatment of a patient with a diastema of the maxillary anterior teeth was described. Diastema is a mesiodistal gap between teeth which is a non-aesthetic situation.

Case Report: A 26-year-old male patient was admitted to our clinic with a request of diastema and basic crowding of the upper front teeth due to aesthetic discomfort. Intraoral and radiographic examination revealed diastema of the maxillary anterior incisors as well as a gingival irregularity. The periodontal health status of the patient was within the accepted limitations, and the teeth were without caries. Available treatment options were explained to the patient and it was decided to treat the gingival recontouring and the diastema with direct composite buildups. An irreversible hydrocolloid impression of maxillary arch was taken and wax-up was performed. A silicone index was obtained from the cast to guide the application of the first lingual composite layer. A second increment of the same composite resin was then placed on the portion of the lingual bevel not covered by the first increment and on the incisal aspect of the fracture with sufficient opacity to hide the fracture line.

Conclusions: Direct composite laminate veneers form a conservative, low-cost treatment option for bridging the unaesthetic gaps between the teeth. Direct composite veneers and gingival recontouring combining resulted in more successful outcome and patient's satisfaction.

Keywords: Composite, crowding, diastema, recontouring

PP 01-40

Correlation of Two Dissimilar Dental Age Determination Methods with Chronological Age and Bone Age in Children Aged Between 8-14 Years in a South Turkish Population**Sevcihan Günen Yılmaz¹, Mevlüde Polat², Münevver Kılıç³***¹Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Akdeniz University, Antalya, Turkey**²Department of Orthodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey**³Department of Pedodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey*

Aim: In this study, different age determination methods were evaluated. The goal of this study is to evaluate the relation of the Demirjian's and Nolla's dental age determination methods with chronological age and bone age in children aged between 8-14.

Material and Methods: In this study, 317 children (B/G:152/165) were included. The population's chronological age and bone age in accordance with Greulich-Pyle Atlas by scoring left wrist radiograms, dental age according to Demirjian's and Nolla's Methods by using panoramic radiograms were detected and relations between each other were examined.

Results: As the whole study group was evaluated, the bone age and the dental ages calculated according to Demirjian's and Nolla's methods was found higher than the chronological age by 0.31 year, 0.68 year and 0.25 year, respectively. For this reason, the closest result to chronological age came from Nolla's method.

Conclusions: It is more accurate to use the Nolla method for this age group in determining tooth age. At the same time, it is possible to have a high degree of accuracy about the tooth age found by the Nolla method and bone age.

Keywords: Chronological age, bone age, dental age, Demirjian's method, Nolla's method

PP 01-41**A Case Report of Periodontal Regeneration with Papilla Preservation Flap Technique: 20 Months Follow-Up**

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Introduction: The ultimate goal of periodontal therapy is regeneration of tissues destroyed by periodontal disease. For this purpose, bone graft material and membrane combination were used to treat intrabony osseous defect.

Case Report: A 60 years old male patient came to the clinic of periodontology for routine periodontal treatment. The patient was exsmoker and had no systemic disease. After clinical and radyological examination, tooth #11 showed mobility grade 1, 7 mm probing depth at mesiobuccal side and 6 mm at mesiopalatal side with bleeding on probing. The tooth had endodontic treatment which performed twenty years ago. After phase1 therapy, flap surgery was planned. After local anesthesia, mucoperiosteal flap was raised using papilla preservation technique. After flap elevation, it was seen a perforation buccal aspect of the root. MTA was placed into perforation site. One wall intrabony defect was filled with deproteinized bovine bone graft and covered with collagen membrane. Flap secured with simple interrupted 4.0 prolene suture. A periapical radiograph was taken after surgery. Antibiotic (amoxicilin 500mg, 3x1) and chlorhexidine (CHX) mouth rinse (0.2%, twice a day) were prescribed. One week after surgery, membrane exposure was seen and applied 1% CHX gel. It was asked the patient to use CHX mouth rinse one more week. Three weeks after surgery, epithelization was completed in palatal side. Probing depth, gingival recession were recorded after six weeks. The tooth still had mobility grade-1. The patient reported no pain or discomfort. Another periapical radiograph was taken after eight months. Bone filling was observed apical part of defect. The patient was again recalled after 20 months. Clinical parameters were recorded.

Conclusion: Deproteinized bone graft and collagen membran combination with papilla preservation flap technique is effective for the management of intrabony osseous defects.

Keywords: Guided tissue regeneration, intrabony osseous defect, papilla preservation flap technique

PP 01-42**Prosthetic Rehabilitation of Edentulous Space with Fiber Reinforced Composite Resin**

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Introduction: Loss of the anterior teeth can be detrimental to the patient both psychologically and socially. A rapid replacement is important to prevent tipping of adjacent teeth and to maintain the aesthetics and phonetics. Many treatment options are available for this replacement, such as insertion of an dental implant or a conventional fixed partial denture and removable prosthesis. The aim of these clinical reports were to describe the technique for the patient who lost their anterior teeth, using fiber reinforced composite resin.

Case Report: Each of these approaches has its own specific advantages and disadvantages in terms of usage, aesthetics, and compatibility. In such patients, fiber reinforced composite (FRC) resin based restorations may be a good treatment option. Conservation, natural preservation, minimal invasion, aesthetic maintenance, ease of application, single chair side, cost effectiveness and metal-free content are some of the advantage of these method. Their usage is clearly indicated for both short- and long-term restorations. It has been reported that a fiber reinforced replacement of edentulous space provides adequate strength and esthetic requirements in such cases.

Conclusion: Using fiber reinforced composite material seems to be a good option; as this technique is rapid, conservative and aesthetic for the patient.

Keywords: Edentulous anterior teeth, fiber reinforced composite, rapid treatment

PP 01-43**The Rehabilitation of Congenitally Missing Teeth with Young Patients*****Zeynep Aslı Özkaya Güçlü, Buşra Kürem****Department of Pedodontics, Erciyes University Faculty of Dentistry, Kayseri, Turkey*

Introduction: Congenitally missing teeth (CMT), is the absence of one or few teeth which is rare in primary dentition. That agenesis could be result from the problems that arise the onset of tooth development or from the dental lamina stage and familial inheritance. Pediatric dentists could play a huge role to maintain a child with CMT. Two CMT cases and rehabilitation was shown in this report.

Case Report: The first case in 2014, a 3-year-old child patient was applied to Erciyes University, Faculty of Dentistry, Department of Pedodontics with complaint of the delay of normal dentition. The clinical and radiographic examination showed all primary second molar teeth were absent. There was no family history in this case. All caries treated and extraction was done under sedation, space maintainer was planned by the beginning of permanent dentition. Patient was followed for permanent first molar teeth eruption and at the age 6 panoramic radiography was taken, which showed all molar germs were absent. Prosthetic replacement was done by the age of six. The second case in 2017, a 10-year-old child patient, the mandibular left second permanent molar, mandibular right first and second molar tooth germ was absent after clinical and radiographic examination. There was no systemic problems and family history. After orthodontic consultation, child prosthesis was done after the dental treatments were completed.

Conclusion: Regular visits for 3 months is scheduled to monitor oral hygiene and adjustment of the prosthesis. At the 6 months follow up period nutrition of the patient and oral hygiene was improved.

Keywords: Prosthesis, congenital, missing, hypodontia

PP 01-44**Anterior Fiber-Reinforced Resin Composite Pontic in a Single Visit: A Case Report*****Merve Candan, Burak Buldur****Department of Pediatric Dentistry, Faculty of Dentistry, Cumhuriyet University, Sivas, Turkey*

Introduction: The loss of anterior teeth can psychologically and socially harm the children. Following the loss of the anterior tooth, an urgent restoration is needed to avoid esthetic, chewing, phonetic difficulties and to preserve the toothless area.

Case Report: A 12-year old boy was admitted to the Department of Pediatric Dentistry in Cumhuriyet University, Sivas with the complaint of absence of the right maxillary incisor tooth, and non-aesthetic composite restorations in left maxillary incisor teeth and hypoplastic deformity in the right maxillary lateral tooth. The patient refused the orthodontic treatment. Informed consent was obtained by both of parent and patient. Fiber-reinforced composite restoration was preferred by taking consideration the age of the children, the period of growth and development as increase in the intercanine distance stops during the 12 years old. Unaesthetic restorations were renewed. Resin composite strip crown was applied to the right maxillary lateral tooth.

Conclusion: The use of fiber-reinforced resin composite pontics offers the optimum size, shape and color advantages. Also, this treatment gives advantages to patients who can not tolerate prolonged treatment sessions, as well as ease of use, and natural feeling compared to removable partial dentures. Such bridges may be preferred since they can be performed in a shorter time without laboratory application, and they are less costly in patients who have difficulty in economically for long-term temporary fixed prosthetic treatments or mini-implant applications.

Keywords: Composite pontic, fiber-reinforced resin, tooth loss

PP 01-45**Unilateral Fusion of Mandibular Permanent Lateral Incisor with Canine, 3 Years Follow-Up: A Case Report*****Merve Candan, Murat Ünal****Department of Pediatric Dentistry, Faculty of Dentistry, Cumhuriyet University, Sivas, Turkey*

Introduction: Tooth fusion is characterized by the union of two dental germs during the developmental stage; it results from an aberration of both the ectoderm and the mesoderm. The crowns are fused by the enamel and/or by the dentin, and may show two roots or two root canals in a single root. Tooth fusion in the permanent dentition is less frequent than in the primary dentition. Unilateral incidence is about 0.5% in primary dentition and 0.1% in permanent dentition.

Case Report: A 10-year old boy was admitted to clinic for routine dental examination. During the clinical examination, the fusion of mandibular canine and incisor tooth was found incidentally. Fusion was only noticeable when looked at carefully. The crowns were morphologically close to normal. Radiographic examination demonstrated two separate roots and pulpal canals. Patient and his parents were unaware from this situation. Follow-up to the patient was recommended.

Conclusion: Double teeth could cause aesthetic and functional problems. Such as, carious lesions on the grooves, particularly in the fusion zone; periodontal problems associated with the grooves that extend subgingivally; asymmetries, as fusion and gemination occur in the anterior segment; malocclusions, especially when supernumeraries are involved. Fusion is generally asymptomatic, but the variations in tooth morphology often require a treatment specifically designed for each case, potentially including root canal treatment, surgical removal of one of the roots, or even tooth extraction and prosthetic treatment or non-invasive aesthetic composite restorations. According to the 3 years follow up, in this case, there were no need for orthodontic or restorative therapies.

Keywords: Tooth fusion, double teeth, mandibular lateral incisor, mandibular canine

PP 01-46**The Prosthetic Rehabilitation of a Partial Edentulous Maxilla Treated with Dental Implants Using The "Toronto Bridge" Technique*****Merve Dede, Onur Geçkili, Fatma Ünal****Department of Prosthodontics, School of Dentistry, University of Istanbul, Istanbul, Turkey*

Introduction: Different characteristics of screw- and cement-retained implant restorations may influence the esthetics, retrievability, retention, passivity, occlusion, accessibility, cost, and provisional restorations. Dental implants have provided exceptional rehabilitative options for edentulous and partially edentulous patients. The Toronto Bridge is a treatment modality proposed for restoring several missing teeth in patients with increased vertical bone resorption.

Case Report: This case report describes the prosthetic rehabilitation of a partial edentulous maxilla treated with dental implants using the "Toronto Bridge" technique for restoring both function and aesthetics.

Conclusion: This type of prosthesis is a screwed-in mesostructure with milled abutments for the cementation of single or multiple suprastructures. This device could also be named "abutment-hybrid overdenture".

Keywords: Cement, dental prosthesis, implant-supported, prosthesis design, screw

PP 01-47**Endocrown As a Therapeutic Approach to Endodontically Treated Teeth – A Case Report****Hasan Yıldırım Özer, Merve Erdoğan, Onur Altuğ Sakallı, Selim Erkut***Department of Prosthetic Dentistry, Faculty of Dentistry, Baskent University, Ankara, Turkey.*

Introduction: Different treatment options are available for endodontically treated teeth. Most of them in routine practice are preferably post core treatment. However endocrown restoration is an alternative option for greater destruction in conservative dentistry.

Case Report: A 55-year-old woman whose right maxillary first molar treated by endodontically has consulted to our clinic demanding a prosthodontic treatment. After a complete radiological and clinical examination. Reported that hepatitis C in patients who received medical history. Patient reported with a fractured restoration in upper right back region of upper jaw. Various treatment modalities were discussed and conservative approach of restoring the tooth with an endocrown was decided as the treatment option, as more than half the residual tooth structure was remaining. The present case report describes an aesthetic and conservative posterior endocrown restoration of a nonvital tooth using lithium disilicate glass-ceramic. (IPS E-max, Ivoclar Vivadent) The impression were taken with polyvinylsiloxane impression material. After the checks were done, endocrown was bonded with using resin cements. In regard to the restoration design, the modified endocrown design with intraradicular extensions protected the remaining tooth structures better than post-core design.

Conclusion: As a result the quantity and quality of the coronal structure are crucial in this clinical scenario. By contrast, the adhesion of prefabricated posts has limited long-term stability making this procedure effective only in selected cases. Thus, other therapeutic alternatives should be considered. When the pulp chamber retention cavity is favorable, as in the present case, endocrown restoration may be indicated to restore the biomechanics of the tooth.

Keywords: Endocrown, biomechanics

PP 01-48**Aesthetic Approaches in Anterior Teeth: A Case Report****Merve Yılmaz, Emine Şirin Karaarslan***Gaziosmanpaşa University, Faculty of Dentistry, Department of Restorative Dentistry, Tokat, Turkey*

Aim: Diastema is caused by differences between sizes of two adjacent tooth or gaps in the dental arch; and thereby this gives rise to considerable aesthetic disorders and dentofacial incompatibility. Especially, spaces seen among many teeth in the anterior region is named as polidiastema. One of the most important reasons are genetic factors. The aim of this case report was to present diastema closure with incremental direct composite resin technique.

Case Report: After examination patient, having esthetic concern of interdental gaps in anterior region, the following indications were identified; Macrodontia on the #21 tooth of the patient, hipertrophic upper lip frenulum and polydiastema in upper anterior region were observed. The mesial surface of tooth number 21 was prepared with a diamond bur in order to reduce the width of the tooth achieving a symmetrical midline 3 times every 2 weeks. Frenectomy procedure was performed by using diode laser (Epic 10 Diode Laser, Biolase, USA) and waited for healing for 10 days. Direct composite resin restorations were planned for upper anterior incisors in order to achieve an esthetic appearance. After necessary isolation processes and total-etch adhesive system application, direct composite resin restorations were carried out using a supra-nanofilled composite resin (Estelite Sigma Quick, CA, USA) in A1 in appropriate increments.

Conclusion: This method provides a satisfying esthetic and durability while protecting dental tissues as an alternative to prosthodontic approaches.

Keywords: Diode laser, Frenectomy, Macrodontia, Polidiastema

PP 01-49**Aesthetic Approaches to Traumatized Teeth: Two Cases Reports**

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Aim: Crown fractures are frequent dental injuries, especially in young patients. It is beneficial to quickly restore the function and the aesthetics of a traumatized tooth. Esthetic and easy rehabilitation of these anterior teeth is possible using layering techniques and direct composite resin restorations. In these case reports, direct composite laminate veneer technique was used for two patients with esthetic problems related to fractures.

Case Report: After examination of two patients, having esthetic concerns, the following indications were identified: Case A: A 16-year-old female patient was referred to the clinic with fracture of the two maxillary central incisors. After clinical examination, the fracture was incisal, triple of the crown without pulp exposure was revealed in both teeth. Case B: A 39-year-old male patient attended for the treatment of the fractured #11 tooth that involved enamel and dentin without pulp exposure. After necessary isolation processes and total-etch adhesive system application, direct composite resin restoration was carried out using a universal dentin microhybrid composite resin (Filtek Z250, 3M ESPE, MN, USA) for case A. Then, a supra-nanofilled composite resin (A1, A2, shades Estelite Sigma Quick, CA, USA) was incrementally applied for cases A, B respectively.

Conclusion: This method provides a satisfying esthetic and durability while protecting dental tissues as an alternative to prosthodontic approaches.

Keywords: Crown fracture, direct composite restorations, incisal fracture, trauma

PP 01-50**Bisphosphonate-Related Osteonecrosis of the Jaw: Case Reports**

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Introduction: Bisphosphonates are powerful drugs used to treat osteoporosis and malignant bone metastasis. Side effects are seen rarely, while osteonecrosis of the jaws is one of them. Osteonecrosis occurs in the maxilla and mandible due to corruption of blood supply. Especially in the maxilla and mandible, it is the result of exposure to trauma and the damage of the thin periosteum on the resultant and the settlement of microorganisms easily in this region. Clinical symptoms such as oropharyngeal pain, mobility in teeth, fistulization, trismus, infection can be observed in these patients.

Case Report 1: A 62-year-old male patient presented with complaints of pain in the lower jaw to Istanbul University Dentistry Faculty. Osteonecrosis was diagnosed preliminarily in the intraoral examination. In his anamnesis using bisphosphonate after stomach cancer was learned.

Case Report 2: A 63-year-old female patient who applied to Istanbul University Dentistry Faculty with the having of pain and swelling in the right lower jaw. Intraoral examination revealed fistulization in this region. Using bisphosphonate after osteoporosis treatment was learned in her anamnesis.

Conclusion: In these case reports, surgical treatment of osteonecrosis due to use of bisphosphonate is described.

Keywords: Bisphosphonate, osteonecrosis, surgical treatment

PP 01-51**Dental Implants in Children with Oligodontia or Anodontia: Three Case Reports*****Mustafa Aydinbelge¹, Haydar Albayrak², Hüsnüye Gümüş¹, Emrah Soylu³, Parisa Ghanbarzadeh¹***¹*Department of Pediatric Dentistry, Faculty of Dentistry, Erciyes University, Kayseri, Turkey*²*Department of Prosthetics, Faculty of Dentistry, Erciyes University, Kayseri, Turkey*³*Department of Oral Maxillofacial Surgery, Faculty of Dentistry, Erciyes University, Kayseri, Turkey*

Introduction: Using dental implants in children is still controversial. The replacement of teeth by implants is usually restricted to patients with completed craniofacial growth, however reports in the literature suggest that dental implants can be used successfully in partially and completely edentulous arches of children affected by congenital diseases, oral cancers, ectodermal dysplasias and Rhabdomyosarcomas. It is recommended that while deciding the optimum individual time point of implant insertion, the status of skeletal growth, the degree of hypodontia, and extension of related psychological stress should be taken into account, in addition to the status of existing dentition and dental compliance of a pediatric patient. Follow-up by a multidisciplinary team involving pediatric dentistry, orthodontics, prosthodontics, and oral-maxillofacial surgery specialists is advocated to be the most appropriate approach in such cases. The use of implants in the prosthetic rehabilitation of these children may provide considerable improvement over traditional prosthetic methods.

Case Reports: In this case report, 3 cases that treated multidisciplinary with dental implants are presented.

Conclusion: In both cases the implants were functionally loaded and resulted in a high patient satisfaction. We recommend the early insertion of dental implants in children with severe hypodontia, oligodontia or anodontia related to congenital diseases, oral cancers, ectodermal dysplasias or similar conditions to improve the quality of life.

Keywords: Dental implant, children, esthetical rehabilitation

PP 01-52**Bleaching Treatment of an Open-Apex Tooth: A Case Report*****Neslihan Yılmaz Çirakoğlu¹, Vildan Tek²***¹*Department of Endodontics, Faculty of Dentistry, Karabük University, Karabük, Turkey*²*Department of Endodontics, Faculty of Dentistry, Bülent Ecevit University, Zonguldak, Turkey*

Introduction: Bleaching of discoloured teeth, either vital or devital, because of increased interest in esthetic dentistry, has become very famous. Devital bleaching has numerous advantages (less time consuming, more economical and conservative) over other treatment options such as full veneer crowns. This case report aims to report orthograde endodontic treatment with MTA and bleaching procedure of an open-apex tooth.

Case Report: A 28-year-old female patient who complained of discoloured and unaesthetic appearance of her upper lateral incisor referred to our clinic. According to periapical radiograph; the tooth 12 was an open apex tooth and wide periapical radiolucency was observed around it. The tooth 13 was also devital. Endodontic treatment was performed the teeth during two appointment. The tooth 13 was obturated with gutta-percha and resin-based sealer using single cone technique. The tooth 12 was obturated with MTA using apical plug technique. Bleaching procedure was delayed for two weeks. Because MTA could increase discolouration. Therefore, teeth were restored with temporary filling material. After a pre-bleaching photograph was taken for the patient, preventive applications were carried out. 35% hydrogen peroxide gel (Opalescence Endo) was then applied. We changed the gel and repeated the bleaching until desired results were obtained. Post-bleaching appearance of the teeth were pleasurable.

Conclusion: According to 3 and 6 months follow-ups, teeth were symptom-free. The presence of resorption and radiolucency was also assessed radiographically and there was no evidence of cervical or progressive apical resorption. Also the colours of teeth were still satisfactory for the patient.

Keywords: Bleaching, endodontic, esthetic dentistry, MTA

PP 01-53**Saliva Ischemia Modified Albumin (IMA) Level in Patients with Severe Caries****Ahmet Ercan Hataysal¹, Ali Unlu², Esra Paydas Hataysal², Sedat Abusoglu², Nimet Unlu¹**¹Selcuk University, Faculty of Dentistry, Department of Restorative Dentistry, Konya, Turkey²Selcuk University, Faculty of Medicine, Department of Biochemistry, Konya, Turkey

Aim: Dental caries is a multifactorial infectious disease, are seen in almost every human being from childhood to old ages and one of the biggest reason people go to the dentist most often. Because of tissue damage and infection, reactive oxygen species are released from tissue and cause chemical changes in albumin molecule. Albumin transforms into IMA. Our aim was to identify IMA levels in saliva that might lead to diagnosis in groups with high caries risk.

Materials and Methods: Saliva samples were collected from 48 healthy controls and 149 patients with severe caries, admitted to SU Dentistry Faculty clinics. Saliva samples were collected according to stimulated saliva collection procedure. IMA levels were measured using albumin cobalt binding test by Perkin Elmer Lambda spectrophotometer.

Results: Salivary IMA levels were statistically higher in patients with caries mean (1.009±0.45 ABSU) compared to control group mean (0.86±0.3 ABSU)(p=0.01). There was no correlation between caries numbers and salivary IMA levels (p=0.2). Additionally, there was no statistical significance between periodontitis, plaque, gum bleeding, smoking, systemic disease and salivary IMA levels.

Conclusion: We evaluated the use of IMA levels in saliva for diagnosis of caries as it is simple, non-invasive and can be easily collected. It was found that patients with dental caries have statistically higher salivary IMA levels independent of other dental or systemic diseases. We claim that the active infection caused an increase in the level of salivary IMA. Salivary IMA levels may be considered as novel biochemical marker in patients with severe dental caries.

Keywords: Dental caries, ischemia modified albumin (IMA), saliva

PP 01-54**Aesthetic Rehabilitation of Multidiastema by Direct Composite Resin: 2 Case Report****Numan Aydın, Serpil Karaođlanođlu, Elif Aybala Oktay, Fulya Toksoy Topçu, Funda Demir**

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Introduction: As a result of increasing aesthetic expectations, diastema closing on the anterior teeth has become a frequent treatment. In the treatment of diastema, direct composite restorations, ceramic and composite laminates are applied. In this case report, 2 diastema closure cases rehabilitated by applying direct composite are presented.

Case Reports: It was planned to close the polidiastemas of the anterior teeth of 2 patients, who referred to our clinic with aesthetic complaints, with direct composite restorations. Periodontal treatment were applied to prevent inflammation and bleeding in the gums in the diastema area, one week before the treatment started. After isolation from two diastema cases, the teeth which are contact with diastema area were roughened with fine grained (yellow) diamond burs (Diamond burs F0-32EF).35% orthophosphoric acid was applied to roughen the tooth surfaces (Scotchbond™ acid, 3M-ESPE, USA). After rinse and dry, the bond (Singlebond™ Universal, 3M ESPE, USA) was applied and polymerized by LED light. A2 dentin and A2 enamel nanocomposite were used in the restoration of teeth by layering technique (Filtek™ Ultimate Universal,3M-ESPE, USA). Finishing and polishing were made at the last stage (Sof-Lex,3M-ESPE, Identoflex white, Keer, USA).

Conclusions: At one week and 6 months recalls, the patient had no discoloration, fracture or periodontal problems. Direct composite restorations on diastema cases, providing minimally invasive approach and economical results with a single session, satisfy both patient and dentist. Excellent aesthetic results can be obtained in the treatment of polidiastema with direct composite restorations with a correct treatment plan.

Keywords: Dental aesthetic, direct composite resin, multidiastema.

PP 01-55

Treatment of a Patient with Persistent Upper Deciduous Lateral Incisors: A Case Report***Orhan Çiçek, Nurhat Özkalaycı****Bülent Ecevit University, Dentistry Faculty, Department of Orthodontics, Zonguldak, Turkey***Introduction:** The aim of this report is to present the orthodontic treatment of an adolescent patient with bilaterally persistent upper lateral incisors.**Case Reports:** A sixteen years old female patient with chief complaint persistent deciduous teeth and poor dental appearance were evaluated in terms of orthodontics. Radiographic and intraoral evaluation revealed that skeletal Class II and dental Class I relationships, persistent upper deciduous teeth, diastema between central incisors, protruding central incisors, excessive overjet and critical overbite. In treatment plan, it was decided to remove upper deciduous lateral incisors. After removed persistent lateral incisors, the protruding permanent central teeth were retracted and malocclusion was corrected with preadjusted appliance system that called MBT versatile plus. Fixed orthodontic treatment was completed. The patient was treated successfully. At the ends of treatment, dental Class I molar and canine relationship was achieved. Central incisors teeth were retracted to their proper position. All complaints of the patient have been solved. Satisfying esthetic and functional results were obtained.**Conclusions:** Patients with bilaterally persistent lateral incisors can be treated with fixed orthodontic mechanics. Orthodontic treatment increases the self-confidence of patients.**Keywords:** Persistent, deciduous tooth, lateral incisor

PP 01-56

Treatment of a Patient with Fractured Upper Right Central Incisor Due to Trauma: A Case Report***Orhan Çiçek, Nurhat Özkalaycı****Bülent Ecevit University, Dentistry Faculty, Department of Orthodontics, Zonguldak, Turkey***Introduction:** In this case report, it is presented that the correction of orthodontic problems of a female patient with fractured upper right central incisor due to trauma.**Case Reports:** A seventeen years old female patient with chief complaint unaesthetic dental appearance and crowding was seen at department of orthodontics. Orthodontic evaluation revealed that skeletal Class I and dental Class I relationships, mild crowding, crossbite of upper right lateral incisor, critical overbite and poorly root canal treatment operated on fractured upper right central incisor. In treatment plan, it was decided to apply fixed orthodontic treatment while endodontically controlling the upper right central incisor tooth without permanent tooth extraction. Before applied fixed orthodontic appliance, endodontic retreatment therapy was done. After the upper right incisor was endodontically controlled, the fixed orthodontic appliance was placed.

During fixed orthodontic treatment all teeth were aligned by mildly protrusion. At the end of treatment, dental Class I molar and canine relationship was achieved. Upper and lower anterior teeth were placed to their proper position and all teeth were aligned. All orthodontic complaints of the patient have been solved. Upper right central incisor was endodontically controlled. No problems were found in the right upper central incisor. Satisfying esthetic and functional results were obtained.

Conclusions: Patients with fractured incisor due to trauma can be treated with fixed orthodontic mechanics. Orthodontic treatment plays a key role in the solution of medical, dental and psychosocial traumatic problems.**Keywords:** Fracture, central incisor, trauma

PP 01-57

Dentistry Approach In X Linked Agamaglobulinemia Which Is a Rare Syndrome: A Case Report***Osman Saraç, Pınar Demir****Inonu University, Department of Pediatric Dentistry, Malatya, Turkey*

Introduction: X linked agamaglobulinemia (XLA/ Bruton's Disease) is a congenital immune deficiency disorder caused by abnormal B cell production. It is a rare disease which was described by Colonel Ogden Bruton in 1952 first time. XLA is caused by mutation in the Bruton tyrosine kinase (BTK) gene, located on the long arm of X chromosome. The clinical problems of XLA include bacterial infections such as otitis media, sinusitis, bronchitis and sepsis. Replacement immunoglobulin therapy is the cornerstone of the treatment.

Case Reports: This case report presents dental procedures applied to an 8-year-old patient with XLA disease. Based on immunology consultation, it has been decided to treat the patient under antibiotic prophylaxis. In addition, all dental procedures were performed in the operating room by keeping general anesthesia conditions ready to apply in case anaphylactic shock development. After clinical and radiographic evaluations, we detected deep dentine caries in teeth #74, #84, #85, #15, #25, #36; and colored fissures in teeth #16, #26, #46. It was decided to apply composite restorations/fissure sealants for the permanent teeth and amputations/composer restorations for the primary teeth. Extraction and space retainer were applied to the tooth numbered #85. All of the dental procedures were successfully concluded without any complications and there had been no need for general anesthesia.

Conclusions: There is no proven relationship between X linked agamaglobulinemia (XLA) and dental, oral soft tissues. It is emphasized that infection control of these patients is so important during invasive procedures such as tooth extraction and dental vital treatments.

Keywords: Pediatric dentistry, X linked agamaglobulinemia (XLA), antibiotic prophylaxis, anaphylactic shock, dental treatment

PP 01-58

Management of Dens in Dente with Microdontia in Open Apex Tooth with a Chronic Periapical Lesion: A Case Report***Nagehan Yılmaz, Ozgul Baygın, Yasemin Bayraktar, Tamer Tüzüner****Department of Pediatric Dentistry, Faculty of Dentistry, Karadeniz Technical University, Trabzon, Turkey*

Introduction: Dens in dente the continuation of the enamel fold in the lingual region due to local forces on the tooth bud before calcification of the teeth. It is a rare malformation, showing a wide spectrum of morphological variations such as gemination, microdontia, supernumerary tooth, resulting frequently in early pulp necrosis. Maxillary lateral incisors are the commonest teeth to be affected by this dental malformation.

Case Report: One year ago, an 11-year-old healthy male patient who referred to Karadeniz Technical University, Department of Pediatric Dentistry, for the purpose of checking was found to have dens in dente in tooth #22 in both intraoral examination and periapical X-ray results. The tooth #22 which were begun to root canal treatment in the same visit had an apical lesion. After the hard barrier in the apical region had been cleared using long diamond fissure drill, the canal was shaped with the help of gates-glidden drills. Ca(OH)₂ was sent into the canal until the apex was closed. After 6 months the canal was filled using gutta-percha. The patient was followed for 6 months both clinically and radiographically and findings were successful.

Conclusion: Historically, treatment options were limited to extraction but with the advent of newer elaborate diagnostic tools, endodontic treatment has been a different approach for this anomaly. Dentists have aware of this anomaly because of the risk of apical inflammatory disease. Prophylactic restoration of the development pits of these teeth is important to avoid possible complications.

Keywords: Dens in dente, root canal treatment, open apex, prophylactic restoration

PP 01-59**Aesthetic Treatment of Anterior Teeth with Prepress Laminate: Case Series****İdris Kavut, Rabia Bozbay***Van Yuzuncu Yil University, Dentistry Faculty, Department of Prosthodontic, Van, Turkey*

Introduction: The use of porcelain laminate veneer (PLV) as opposed to metal-ceramic or all-ceramic crowns is a minimally invasive treatment option. PLV have become a routine restorative procedure for treatment of teeth in the maxillary anterior region. Good clinical success rates in terms of esthetics, marginal integration, and occlusion can be achieved at the luting appointment for indirect dental restorations because of technological improvements in dental materials. Minimally invasive PLV have many advantages, such as minimal tooth preparation or no tooth preparation. In addition, there is no need for the administration of local anesthesia before tooth preparation and no need for temporary restoration. Bonding to enamel is the most important advantage of minimally invasive PLV. It was reported that when PLV were supported by enamel tissue, clinical survival rate was higher than for those supported by dentin tissue, due to bond strength between porcelain and enamel.

Case Reports: In this case series, treatment with more conservative prepress porcelain laminae of the patients with aesthetic complaints in the anterior region was discussed. Prepress laminate was applied to the teeth of the anterior region in patients whose indications were appropriate. The bonding is made entirely with adhesive systems. In short and long term follow-ups, patients' satisfaction was high and they experienced no problems.

Conclusions: The prepress laminate provide good aesthetic results when used in appropriate indications. The aesthetic expectations of the patients are met with a conservative approach. Dental integrity is maintained and patient satisfaction is increased.

Keywords: Aesthetic, laminate, prepress

PP 01-60**Papillon Lefevre Syndrome: A Case Report****Ruſen Erdem¹, Alaettin Koç¹, Mehmet Uğur²***¹Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Van Yüzüncü Yil University, Van, Turkey**²Department of Prosthetic Dentistry, Faculty of Dentistry, Van Yüzüncü Yil University, Van, Turkey*

Introduction: Papillon-Lefevre syndrome (PLS) is a rare autosomal recessive disorder. The disorder is characterized by palmaplantar hyperkeratosis and aggressively periodontitis leading to premature loss of deciduous and permanent dentition at early childhood. Several etiologic factors, for example genetic transmission, immunologic conditions and some types of bacterias have been proposed for PLS. A multidisciplinary approach with involvement of dentist, dermatologist and pediatrician is required for management of PLS cases.

Case Reports: We presented a case of a 13-year-old male who attended our department with chief complaint of missing teeth diagnosed as PLS by panoramic radiography image and clinical photos.

Conclusions: Periodontally hopeless permanent teeth of patient was extracted and he is under follow-up to make prosthesis.

Keywords: Papillon Lefevre syndrome, periodontitis, keratosis

PP 01-61**Esthetic Rehabilitation of Patient with Congenitally Missing Maxillary Lateral Incisor: A Case Report*****Rüştü Ersoy Sakarya, Nuran Yanıkoğlu, Berkman Albayrak****Department of Postodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey*

Introduction: Hypodontia is a developmental deficiency of one or more teeth in primary or permanent dentition, except for the third molar teeth. The researchers use various terminologies such as congenital dentition, dental apicality, dental agenesis to describe this condition. Hypodontia is one of the most common developmental anomalies.

Case Report: A 34-year-old female patient with congenitally missing maxillary lateral incisor applied to prosthetic dentistry clinic with complaints of esthetics, caused by polydiastema in the anterior region and the old restorations. In the direction of digital analysis, a wax-up was prepared for the patient. Afterwards tooth preparations were made in the guidance of mock-up. The prosthetic rehabilitation was completed with 4 e.max press MT ingot laminate veneers and 2 zirconium porcelain crowns.

Conclusion: In 6-month clinical follow-up, the patient stated that she was satisfied with aesthetics, phonetics and function.

Keywords: Congenitally missing teeth, diastema closure, esthetic rehabilitation, laminate veneer

PP 01-62**Pseudoepitheliomatous Hyperplasia: Case Report*****Hatice Yemenoğlu¹, Sacide Duman², Şuayip Burak Duman³****¹Department of Periodontology, Faculty of Dentistry, Recep Tayyip Erdogan University, Rize, Turkey**²Department of Pedodontics, Faculty of Dentistry, Inonu University, Malatya, Turkey**³Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Inonu University, Malatya, Turkey*

Introduction: Pseudoepitheliomatous hyperplasia (PEH) is a reactive epithelial proliferation of epithelium on mucocutaneous surfaces. It's a benign lesion. The differential diagnosis of pseudoepitheliomatous hyperplasia from squamous cell carcinoma may be difficult. Pseudoepitheliomatous hyperplasia is a benign lesion and its treatment is conservative; squamous cell carcinoma is a malignant tumor which usually requires aggressive surgery. For this reason, differential diagnosis is very important to avoid radical treatment.

Case Report: A 5-year-old female patient, applied to our clinic with complaint swelling in the gingiva. In the intraoral examination, the lesion in the gingiva on between upper santral and lateral teeth was pink, well-circumscribed and 0.5x0.5 cm in size. There was no evidence of radiographic examination. The lesion was excised after initial periodontal treatment. The biopsy material was examined histopathologically and PEH was diagnosed. 6-month follow up showed absence of recurrence.

Conclusion: Pseudoepitheliomatous hyperplasia is confused with squamous cell carcinoma clinically and pathologically. For this reason, more radical treatment options can be avoided with correct diagnosis.

Keywords: Epithelial hyperplasia, hyperplasia, pseudoepitheliomatous hyperplasia

PP 01-63**Indirect restoration of the tooth that has excessive loss of structure: 3 case reports**

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Introduction: The purpose of this presentation is; to describe indirect restoration of teeth with excessive loss of material.

Case 1: A 26-year-old female patient was admitted to our clinic due to pain in #46 teeth. After the treatment of the canal, we decided to perform indirect restoration of the tooth with excessive loss of material. The cavity was prepared and undercuts was eliminated. A glass ionomer cement (SpofaDental) was placed as the base material. İmpression were taken with a polyether impression material (Soft Monophase, 3M ESPE).Temporary filling material (DiaTemp) was placed in the cavity. Indirect composite material (Solidex, Shofu) was applied on models and polymerized with visible light, following in indirect composite oven (Solidilite V, Shofu). After adopting the restoration to the cavities, it was luted with dual-cure sement (Relyx Ultimate, 3M ESPE) and completed polishing and finishing procedures. (Soflex)

Case 2: A 35-year-old female patient applied to our clinic for restoration of #16 teeth after canal treatment. The cavity was prepared and undercuts was eliminated. Impression and polymerisation process are completed as first case. Restoration luted with dual-cure sement.

Case 3: A 21-year-old female patient was admitted to our clinic due to pain in #46 teeth. The restoration was removed and cavity was cleaned and undercuts was eliminated. Theracal LC (Bisco Inc) was placed on the bottom of the cavity and placed glass ionomer cement base material. Impression and polymerisation process are completed as first case. Restoration luted with dual-cure sement.

Conclusion: Indirect restorations, shown as an alternative to conventional treatment in excessive destruction crown.

Keywords: Aesthetic, dual-cure resin cement, indirect restoration

PP 01-64**DiGeorge Syndrome (22q11 deletion syndrome)**

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Introduction: DiGeorge Syndrome is caused by the deletion of chromosome 22 in 11.2 part. The incidence of 22q11 deletion is approximately seen once in every 4000 births and is inherited in autosomal dominant manner. This syndrome is also described as CATCH 22 or Velocardiofacial Syndrome. Cardiac defect, cleft palate, immunity deficiency due to thymic hypoplasia, renal anomalies, abnormal faces and hypocalcemia as a result of hypoparathyroidism are among the symptoms of this syndrome.

Case Report: A 7 year-old boy with DiGeorge Syndrome was referred as a patient to Marmara University, Faculty of Dentistry, Department of Pediatric Dentistry for dental caries. He is a non-inbred individual and has four siblings who are healthy. The patient has cardiac defect, cleft palate, immunological problems, hearing and speaking problems. He was reported to have heart, cleft palate and ear tube operations in the past. In the conducted intra-oral examination, dental caries and Molar Incisor Hypomineralization (MIH) were observed. None of his caries was symptomatic but dentinal sensitivity is present in all of his four permanent first molars. Restorations of primary molars were made with compomer resin and permanent molars were restored with glass hybrid ionomer. APF gel was applied to full mouth and oral hygiene instructions were given.

Conclusions: Patients with DiGeorge Syndrome are at risk of bacterial endocarditis due to cardiac defect. These patients should attend their dental appointments regularly and apply oral hygiene instructions carefully.

Keywords: DiGeorge, CATCH22, Velocardiofacial

PP 01-65**Lymph Node Calcifications Due to Tuberculosis*****Sevcihan Günen Yılmaz¹, Ibrahim Şevki Bayrakdar²****¹Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Akdeniz University, Antalya, Turkey**²Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Eskişehir Osmangazi University, Eskişehir, Turkey*

Introduction: At the present time tuberculosis is a major health problem, especially in developing countries. The lymph node tuberculosis seen in the cervical region is the most common condition of extrapulmonary tuberculosis. Cervical tuberculosis lymphadenitis, which can be seen frequently in the posterior cervical region and supraclavicular region, can be detected clinically and histologically during the period of the disease. It can be observed radiologically in the form of calcification focuses after healing.

Case Reports: 57-year-old female patient with no systemic disturbance from history was learned that 50 years ago had tuberculosis. Clinically, scar tissue was observed in the surgical intervention performed in the posterior and anterior cervical lymph node regions. On the panoramic radiogram taken from the patient, multiple irregular lymph node calcifications were detected in the left cervical region.

Conclusion: Radiographically seen calcifications in the head and neck region may be due to different reasons. It is important that the patient's story is deepened and put into proper recognition.

Keywords: Lymph nodes, panoramic radiogram, tuberculous lymphoid calcification

PP 01-66**Orthodontic Treatment of a Patient with Functional Class II Malocclusion Due to Upper Incisors' Retrusions*****Orhan Çiçek, Soner Arusoğlu, Nurhat Özkalaycı***
Bülent Ecevit University, Dentistry Faculty, Department of Orthodontics

Introduction: The aim of this case report is to present the orthodontic treatment of an adolescent female patient with functional skeletal Class II malocclusion due to excessive upper incisors retrusion.

Case Reports: A thirteen years old female patient with chief complaint malalignment and poor aesthetic dental appearance were evaluated in terms of orthodontics. Skeletal Class I and dental Class II relationships, extruded upper incisors, deep bite and distally forced closure of lower jaw were seen at radiographic and intraoral evaluation. In treatment plan, it was decided to apply fixed orthodontic treatment without permanent tooth extraction. After applied fixed orthodontic appliances, upper anterior incisors were protruded, and all teeth were aligned during levelling stage. Later, fixed orthodontic treatment was completed when the lower jaw repositioned to its ideal position with the upper jaw. The patient was treated successfully. At the ends of treatment, dental Class I molar and canine relationship was achieved. Upper anterior incisors teeth were protruded to their proper position and deep bite malocclusion was treated. All complaints of the patient have been solved. Satisfying esthetic and functional results were obtained.

Conclusions: Patients with functional Class II malocclusion due to excessive anterior upper incisors retrusion can be treated with fixed orthodontic mechanics. Orthodontic treatment improves aesthetics that will affect people's perspective on life.

Keywords: Functional Class II malocclusion, upper incisor, retrusion

PP 01-67**Correction of Orthodontic Problems of a Patient with Congenitally Missing Lateral Incisors**

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Introduction: Orthodontic treatment of a patient with congenitally missing lateral incisors and open bite was presented in this case report.

Case Reports: A fourteen years old female patient with malalignment and poor aesthetic dental appearance were evaluated orthodontically. Skeletal Class III and dental Class I relationships with anterior openbite were detected at radiographic and intraoral evaluations. In addition, maxillary lateral incisors were congenitally missed. In treatment plan, it was decided to apply hyrax with reverse pull headgear and upper canine substitution for congenitally missing maxillary lateral incisors. Reverse pull headgear was used without hyrax activation during a year. Reverse pull headgear and hyrax were removed when the upper jaw was repositioned. After using reverse pull headgear, fixed orthodontic appliances were applied and lower first premolars were extracted. Fixed orthodontics appliances were supported with Class III elastics. The patient was treated successfully. At the ends of treatment, dental Class I molar relationship was achieved. Open bite malocclusion was treated. All complaints of the patient have been removed. Satisfying aesthetic and functional results were obtained.

Conclusions: Canine substitution can be a treatment alternative for congenitally missing maxillary lateral incisors. Case selection is important when considering canine substitution in cases with a missing lateral incisor. At the ends of orthodontic treatment, with upper canine substitution acceptable aesthetic and function were obtained.

Keywords: Correction, congenital, missing lateral incisors

PP 01-68**Atypical Dentin Dysplasia Type I: A Case Report**

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Introduction: Dentin dysplasia is a rare defect of dentin development with and autosomal dominant pattern of inheritance. We report a case of an atypical features of dentin dysplasia type I in a child.

Case Report: A 9-year-old male patient referred to the Istanbul University, Faculty of Dentistry, Clinics of Pediatric Dentistry. His medical history revealed that the patient had high blood pressure during first week after birth. The intraoral clinical examination showed the presence of the following teeth: #11, #12, #13, #14, #15, #21, #22, #23, #24, #26, #31, #32, #33, #34, #35, #36, #41, #42, #43, #44, #46, and #85. Panoramic radiographic examination confirmed that teeth #26, #36, and #46 presented no root formation; teeth #11 and #21 had short, thin roots; teeth #13, #23, #33, and #43 presented alteration in the pattern of root formation. According to the father, tooth #16 had been extracted due to an extensive carious lesion. Dental care included restoration composite resins in teeth #26, #36, and #46.

Conclusions: The progression of the case is under continuing evaluation. The clinical and radiographic characteristics observed in this patient are different from those reported in the literature, which suggests, that this may be variation of dentin dysplasia type I expression.

Keywords: Dentin dysplasia, root malformation, short roots

PP 01-69**Combined treatment approach with implant-supported prosthesis: A case report*****Işıl Sarıkaya, Sümeyra Kaymak, Hande Yıldız Dilli, Yeliz Hayran****Department of Prosthodontics, Faculty of Dentistry, Gaziosmanpaşa University, Tokat, Turkey*

Introduction: Implant supported overdentures offer many practical advantages over conventional complete dentures and removable partial dentures. These include decreased bone resorption, reduced prosthesis movement, better esthetics, improved tooth position, better occlusion, increased occlusal function and maintenance of the occlusal vertical dimension. Additionally removable partial dentures may offer an attractive treatment option for an edentulous patient, as they may combine an implant supported fixed partial dentures in the anterior segment with a removable appliance in the posterior areas.

Case Report: A 52-year-old female patient reported to the Department of Prosthodontics, Gaziosmanpaşa University, with the chief complaint of missing teeth. In this case report prosthetic rehabilitation of a maxillary and mandibular edentulous patient was performed. Two implants in the upper jaw anterior segment and four in the lower jaw were placed. Implant supported fixed partial denture and removable partial denture with precision attachments were applied to upper jaw. Locator retained-implant supported overdenture was applied to the lower jaw. The patient was happy with the aesthetics of the prosthesis. Post-placement checkup was done after 24 hours, 1 week and 1 month. She was able to masticate and speak.

Conclusion: Implant supported prosthesis can be chosen as an appropriate treatment option. A satisfying restoration can be achieved with fewer implants with combined treatment

Keywords: Overdenture, implant, removable partial dentures

PP 01-70**Prosthetic Rehabilitation of a Patient with Soft Palate Defect and Velopharyngeal Insufficiency: A Case Report*****Sümeyye Cansever, Funda Bayındır****Atatürk University, Faculty of Dentistry, Department of Prosthodontics, Erzurum, Turkey*

Introduction: Obturator is a prosthesis which is used to close defects in maxilla as a result of trauma, congenital malformations and surgical operations of malign or benign neoplasms. Pharyngeal obturator prostheses are used to rehabilitate patients with soft palate defects, velopharyngeal insufficiency and restore the congenital or acquired defects of the soft palate for adequate closure of palatopharyngeal sphincter. Obturation of the defect area is necessary, otherwise it may lead to velopharyngeal disfunction, hypernasality and regurgitation of food and liquids.

Case Report: In this case report, prosthetic treatment of a 53-year old female patient is presented with a pharyngeal obturator. It was determined that the patient was had an operation for oropharynx malign tumor 15 months ago and then had radiotherapy. Because of this maxillary defect, patient had malnutrition and phonetic problems. After the radiographic and intraoral examination of the patient, it was decided to make the lower and upper removable partial prosthesis by keeping teeth in the mouth. A functional impression was taken from the defect area and a cast model was produced. The permanent removable prosthesis was prepared in that cast model.

Conclusion: During the 3-month follow-up period of our patient, no problems were encountered. The patient's speech had developed day by day due to prosthetic treatment. The results were satisfying for patient.

Keywords: Maxillary defect, pharyngeal obturator, velopharyngeal insufficiency

PP 01-71**Prosthetic Rehabilitation of an Edentulous Mandible with All-On-4 Immediate-Function Concept: A Case Report*****Sebnem Özatik¹, Güven Can Çınar¹, Buket Aybar², Yusuf Emes², Canan Bural¹***¹*Department of Prosthodontics, Faculty of Dentistry, Istanbul University, Istanbul, Turkey*²*Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Istanbul University, Istanbul, Turkey***Introduction:** Immediate implant function has become an accepted treatment option for fixed restorations in edentulous cases.**Case Report:** This clinical case report presents a 69-year-old patient with edentulous mandible rehabilitated with immediate loaded implants using the All-on-Four concept. Mandibular complete denture were fabricated using conventional techniques before implant surgery. Four implants were placed according to the All-on-four concept. After implant installation, the borders of the mandibular denture was modified, the occlusal contacts were checked and corrected. The implants were immediately loaded at the day of surgery. This provisional implant-supported mandibular denture was used for 3 months. The final hybrid fixed restoration with porcelain fused to metal restoration was fabricated. Radiographic assessment of the marginal bone level was performed after 6 months in function.**Conclusion:** Immediate loaded implants using the All-on-Four concept is an advantageous and effective treatment protocol for edentulous cases especially when fixed prosthetic rehabilitation is preferred.**Keywords:** All-on-four, hybrid denture, immediate loading, prosthetic rehabilitation**PP 01-72****Effects of Y Plate and Chin Cup Therapy on Patient with Skeletal Class III Malocclusion: A Case Report*****Taner Öztürk, Kübra Gülnur Topsakal, Nisa Gül Amuk****Department of Orthodontics, Faculty of Dentistry, Erciyes University, Kayseri, Turkey***Introduction:** The aim of this case report was to present the treatment outcomes of Y plate and chin-cup therapy on a preadolescent patient with skeletal Class III malocclusion.**Case Report:** A 11 year 4 month old female patient's main complaint was mandibular prognathie. Angle Class III molar relationship, negative overjet, anterior cross-bite, positive overbite and posterior cross-bite were observed clinically. Cephalometric evaluation showed that skeletal Class III malocclusion (ANB: -2.7°), normal growth pattern, -3 mm overjet and 2 mm overbite. The treatment objectives were to obtain Class I molar relationship, balanced soft tissue profile and improvement functional malocclusion. Y plate was applied to correct posterior and anterior crossbite, three screws were activated 2 times a week (per 0.25 mm activation) and chin cup was applied to retardation of mandibular growth. After getting a positive overjet and orthognatic profile, the patient was used chin cup only at nights until the post pubertal period for avoid relapse. This patient was followed for 2 years and 6 months.**Conclusion:** As the outcomes of Y plate and chin cup treatment, skeletally Class III malocclusion and negative overjet were corrected (ANB:0.7°, overjet: 1 mm), vertical dimensions were increased and balanced soft tissue profile was provided.**Keywords:** Y plate, chin cup, skeletal Class III malocclusion

PP 01-73**Application of Zirconia Restoration after Gingivectomy on Maxillary Anterior Region****Tuğçe Kavaz¹, Hatice Özdemir¹, Didem Özkal Eminoğlu²**¹Prostodontics-Ataturk University Erzurum, Turkey²Periodontology-Ataturk University Erzurum, Turkey

Introduction: There are different options for prosthetic rehabilitation of anterior teeth. Clinicians may prefer zirconia restorations on anterior and premolar teeth due to its sufficient esthetic and functional properties in daily routine. Prosthodontics also may get help from gingival surgery to optimize the esthetic of restorations.

Case Reports: A 50-years-old female patient who applied Atatürk University, Faculty of Dentistry, prosthodontics clinic complained about marginal discoloration, secondary caries and post-operative sensitivity on maxillary anterior teeth which were restored with composite resin previously. The patient had healthy periodontal tissues. She also had very high smile line resulted in gummy smile. Firstly, the gummy smile was operated with gingivectomy and the lip repositioning operation wasn't accepted by the patient. The length of anterior teeth was increased with conventional surgical gingivectomy and gingivoplasty without respective osseous surgery. The prosthetic treatment was started after 2 weeks following gingivectomy. After the analysis of occlusion, tooth preparation with shoulder at gingival margin was done for all teeth. Gingival retraction was applied before taking impression. Provisional crowns was prepared to prevent from dental sensitivity and supply the healing of gingival tissues. Zirconia restorations was prepared 3 week later and cemented with dual-cure resin cement. An occlusal splint was prepared to protect the zirconia restorations against the bruxism.

Conclusions: Clinicians may choose suitable esthetic and functional materials according to the cases. Gingivectomy may help to clinicians to improve the esthetic appearance of final prosthetic restoration by lengthening the clinical crown.

Keywords: Gingivectomy, crown lengthening, zirconia

PP 01-74**Single Tooth Replacement with Fiber-Reinforced Bridge: A Case Report****Tuğgen Özçivelek Mersin¹, Serpil Karaoğlanoğlu², Elif Aybala Oktay², Fulya Toksoy Topçu², Numan Aydın²**¹75 th Year Ankara Oral And Dental Health Care Hospital, Republic of Turkey Ministry of Health, Ankara, Turkey²Department of Restorative Dentistry, Gulhane Faculty of Dentistry, University of Health Sciences, Ankara, Turkey

Introduction: In contemporary dentistry implant treatment is the prominent method for replacing single missing tooth. However the amount of transverse bone present is often a limiting factor. Some systemic conditions, social and financial issues can also be considered as contraindication for implant treatment. Conventional prosthetic alternatives should also be considered in such circumstances. Here we present our case in which we replaced a single missing tooth with a fiber-reinforced adhesive bridge.

Case Report: A 35-year-old female patient who has a missing right upper canine tooth (tooth number # 13) due to periodontitis, referred to the clinic. As the amount of transverse bone was insufficient in intraoral and radiographic examination, bone graft and implant treatment was proposed. Patient refused the procedure because of costs and limited time. To consider grefting in the future, she also didn't want to get her teeth prepared. A fiber-reinforced adhesive bridge was planned. The adjacent teeth were minimally prepared for retention of the Glass fiber (Angelus Interlig, Londrina, PR, Brasil) and it was fit to the edentulous span. Pontic was fabricated with composite (Estelite Sigma Quick, Tokuyama, Japan) and cemented using 37% orthophosphoric acid (Alpha Etch Jel, Rio de Janerio, RJ, Brazil), bonding (Bond Force, Tokuyama, Japan) and flowable composite (Estelite Flow Quick). The patient has been using this restoration for 2 years without any problem.

Conclusions: Due to the recent developments in fibers, composites and adhesive systems, fiber-reinforced bridges might be used as an alternative treatment modality to single tooth replacement when implants are not suitable.

Keywords: Restorative dentistry, fiber bridge, dental composite materials

PP 01-75**Aesthetic Rehabilitation of The Anterior Region with Direct Composite Resin Applications: Case Series*****Vahti Kılıç, Feridun Hürmüzlü****Cumhuriyet University Faculty of Dentistry, Department of Restorative Dentistry, Sivas, Turkey*

Introduction: Increasing the aesthetic expectation of the patients and the desire not to damage the healthy tooth tissues during the treatment have increased the orientation towards direct composite resin applications. Aesthetic rehabilitation of three patients with aesthetic problems in the anterior region was aimed with direct composite resin application in these cases.

Case-1: A 16-year-old female patient was admitted to our clinic with complaints of a right upper peg lateral and left upper congenitally missing lateral incisor. The examination revealed that the patient's occlusion was favorable for composite resin application and the periodontal condition was healthy. First color selection was made. Following isolation, the areas to be restored were etched with 37% phosphoric acid. After washing and drying, adhesive system was applied. Nanofilled composite material was applied with the aid of a transparent band extending to the gingival sulcus until the appropriate contour was achieved. Then finishing and polishing procedures were made taking into account the patient's wishes.

Case-2: A 28-year-old male patient was admitted to our clinic with complaints of aesthetic problems due to persistent lateral deciduous teeth. The patient did not accept tooth extraction and orthodontic treatment and demanded treatment of his teeth directly with composite restoration. First the decay of right lateral's mesial was removed. Then the teeth were restored in accordance with the above procedures.

Case-3: A 35-year-old female patient was admitted to our clinic with complaints of anterior diastema. Diastema was closed with the same procedures above.

Conclusions: With a direct composite resin application, aesthetics that will delight the patient can be achieved in a short time without damaging the healthy dental tissue.

Keywords: Aesthetic, direct composite resin, diastema, peg lateral incisor

PP 01-76**Minimal Invasive Aesthetic Applications In Fluorosis: A Case Report*****Yasemin Özden, Cemile Yılmaz, Özgür Kanık****Afyon Kocatepe University, Faculty of Dentistry, Department of Restorative Dental Treatment, Afyonkarahisar, Turkey*

Aim: To obtain a natural aesthetic appearance to the patient who complains about discoloration due to fluorosis and the gap between the upper central teeth. The case was treated with office bleaching and direct composite resin application.

Materials and Methods: A 32 year-old female patient applied with yellow-brown discoloration due to fluorosis in the upper central teeth. The patient was informed about treatment procedure. Then tooth surfaces were cleaned. After that gingival barrier (Opal Dam Green, Ultradent) was used for isolation. A bleaching agent (Opalescence Boost, Ultradent) with 40% hydrogen peroxide content was applied according to the manufacturer's instructions for 15 minutes with light activation (SAAB) and was repeated twice in the same seance. At the first month of control, diastema closure procedure was finished after the success of whitening. A total etch (N-Etch, Ivoclar Vivadent) procedure with universal adhesive resin (Tetric Universal, Ivoclar Vivadent) was preferred. Enamel-colored composite resin (A2E, Clearfil Majesty Es-2, Kuraray) was adjusted to the palatal and aproximal part of the restoration. The restoration was completed by applying dentin-color composite resin (A2, Clearfil Majesty Es-2, Kuraray) and enamel-color composite on upeer surface of restoration. Restorations was finished with aluminum oxide discs (Supersnap, Shofu) and polished with silicone polisher (Silicone-Polishers, Eve Ernst Vetter). Photographs were taken and archived in the third month control.

Conclusion: The office bleaching method provides satisfactory results in fluorosis-based discoloration and the gaps between the teeth can be successfully closed with direct composite resin application.

Keywords: Aesthetic, diastema, fluorosis, office bleaching

PP 01-77**Primary Reconstruction Technique After Radical Maxillectomy for a Patient Who Was Squamous Cell Carcinoma in The Hard Palate*****Yeliz Hayran, Arzu Yüksel, Ayşe Uysal****Gaziosmanpasa University, Faculty of Dentistry, Department of Prosthodontics, Tokat, Turkey*

Introduction: The treatment of malignant tumors like squamous cell carcinoma in the palate is the surgical removal of these tumors. After the removal of the malignant region, the patient has difficulty speaking, chewing and swallowing. It is appropriate to use a temporary obturator in order to gain the function and aesthetic that the patient lost in such cases. A removable temporary maxillary obturator is an alternative treatment method until a definitive obturator is manufactured. This case presents a primary reconstruction technique after radical maxillectomy for a patient who was squamous cell carcinoma in the hard palate.

Case Report: An old male patient diagnosed with squamous cell carcinoma in the hard palate was referred to Gaziosmanpasa University, Faculty of Dentistry. There was only one tooth (#23) at the maxilla. The malign tumor was located in the left half of the hard palate. The region where the tumor was located was resected and the defect region was left to heal for 2 weeks. The defect region was rehabilitated with an open bulb obturator with chromium cobalt framework 2 weeks after surgical resection. The fabricated temporary obturator closed the hard palate and overcome chewing, speaking and swallowing problems.

Conclusions: The removal of the hard palate region diminishes the effectiveness of swallowing and chewing and the speech becomes difficult. The mental condition of the patient is negatively affected in this process. The temporary obturator improve the patient's psychological and functional until a definitive obturator is manufactured.

Keywords: Maxillofacial obturator, squamous cell carcinoma, hemimaxillectomy

PP 01-78**Myofunctional Therapy with a Trainer System in a Juvenile Patient: Case Report*****Feyza Holoğlu, Yıldırım Özdemir, Fatih Çelebi, Ali Altuğ Bıçakçı, Sibel Akbulut****Department of Orthodontics, Faculty of Dentistry, Gaziosmanpasa universty, Tokat, Turkey*

Introduction: The trainer system has been developed to combine the alignment of teeth with myofunctional therapy. The appliance is designed to actively regulate the tongue position, orofacial muscles and breathing habits and to arrange the anterior teeth. Soft tissues must be evaluated before orthodontic treatment because it affects dental position. Due to the myofunctional effect in the trainer system, it is ensured that the soft tissues are directed correctly.

Case Report: A chronological age of 9 years and 2 months, the male patient in the juvenile period referred to our clinic because the upper teeth were in front. Clinical and model studies revealed that the patient had a Class II division 1 anomalies, increased overjet (+9mm) and overbite (+6mm), hypo-function in the upper lip, and lower lip suction habit during the early mixed dentition period of the patient. It was decided to use the patient trainer system and t4k phase 1 treatment was applied for this purpose. After about 9 months of follow-up, the lower lip sucking habit was lifted. Diastemas and overjet have been reduced due to the retroclination of the upper incisor teeth.

Conclusion: The T4K trainer has helped improve myofunctional habits during the early mixed dentition period. The single piece and easy to use appliances have greatly contributed to both dental and facial development.

Keywords: Myofunctional therapy, trainer system, juvenile patient, increased overjet

PP 01-79**A Rare Variation of Mandibular Condyle: Three Case Reports**

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Introduction: Bifid and trifid mandibular condyle is a rare variation of the mandibular condyle. Their exact etiology is still unclear. Teratogenic drug use, trauma, infection, exposure to radiation and genetic tendency may lead these variations. The aim of this study is to indicate clinical and radiographic findings of bifid and trifid mandibular condyle at three cases.

Case Reports: At the first and second case 41 years old male patient and 33 years old female patients, respectively referred to Dentomaxillofacial Radiology, Faculty of Dentistry, Akdeniz University for routine dental examination. In the male patient, left trifid mandibular condyle and in female patient right bifid mandibular condyle was diagnosed incidentally in routine panoramic examination. There wasn't patient complain (click or pain or both) and trismus both of them. At the third case 46 years old female patient referred to Dentomaxillofacial Radiology, Faculty of Dentistry, Akdeniz University for bilateral pain in front of the ear. The patient had bilateral click at the temporomandibular joint examination. There was muscle tenderness at the palpation and trismus. At the panoramic examination there was trifid condyle at the left condyle.

Conclusions: Most of bifid and trifid mandibular condyle cases are asymptomatic and are found by chance in routine panoramic examination. Because there wasn't patient complain treatment plans were not made for first and second cases. On the other hand the third case was directed to department of Dentomaxillofacial Surgery, Faculty of Dentistry, Akdeniz University for further treatment planning.

Keywords: Rare variation, trifid mandibular condyle, bifid mandibular condyle

PP 01-80**Rehabilitation of Young Patient with Extensive Tissue Loss with Andrews Bridge System: A Case Report**

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Introduction: A patient with several missing teeth in the aesthetic region along with severe ridge defect poses a greater challenge for prosthodontic rehabilitation. In such cases treatment using fixed partial denture (FPD) may not be preferred because of the inadequacy of the abutment teeth due to the width of the edentulous area and the replacement of the losses in the soft tissues. Removable partial denture, which creates an uncomfortable situation due to palatal and lingual coverage. Implant-supported restorations are very successful, but they are of questionable prognosis in case of large ridge defects. Andrews is a combination of fixed and removable systems and extend ridge defect using natural teeth as abutments for its fixed component followed by a removable piece.

Case Report: A 37 year-old male patient referred to department of the prosthodontics at Atatürk University, Faculty of Dentistry with the complaints of edentulous in mandibular premolar region association with extensive support soft tissue loss. The tooth which selected as abutments were prepared according to the principles of full coronal restoration. Silicon-based impression was sent to the laboratory. After the check of fabricated metal infrastructure, the final restoration prepared in the laboratory suitable for the colour of both tooth and gingiva was successfully applied to the patient. The patient is satisfied with both the functional and the aesthetic restorations.

Conclusion: With the Andrews Bridge System, aesthetic and functional satisfactory results can be obtained in the prosthetic rehabilitation of young patients, especially those with large anterior bone and soft tissue loss.

Keywords: Andrews bridge system, extensive ridge defect, fixed removable denture

PP 01-81**Treatment of Anterior Cross-Bite with Removable Appliances: A Case Series*****Zehra Sivgan, Eda Özdemir, Behiye Bolgöl****Mustafa Kemal University, Faculty of Dentistry, Department of Pediatric Dentistry, Hatay, Turkey*

Introduction: Anterior crossbite is a malocclusion type characterized by the presence of the anterior upper teeth in the lingual position relative to the lower anterior teeth. In premix dentition, crossbite correction is very important; because these types of malocclusions do not show spontaneous resolution and may cause abnormal abrasion of the lower incisor teeth, thinning of the lower labial alveolar bone or gingival recession. One of the effective methods that can be used to correct the anterior crossbite is the removable orthodontics appliance. This case report was aimed to treat the patients who applied to our department and who had an anterior cross-bite diagnosis.

Case Report: Two 9-year-old healthy male patients referred to our clinic due to visual disturbances in their upper incisor teeth were included in the study. Anterior cross-bite was detected in the intraoral examination of patients with mixed dentition. We decided to use a removeable appliance with the bite plane and the labiolingual barbell to stabilize the occlusion. After 2 weeks we checked the appliances. After about 1.5 months, it was determined that the anterior cross-bite of the patients was improved successfully.

Conclusion: It is possible to treat the cross-bite seen in one or two teeth in mixed dentition period with removeable appliances without further orthodontic treatment. If the malocclusion does not appear in the permanent dentition, this will suggest a habitual bite occlusion and confirm that the treatment made during the primary dentition's period is the right approach.

Keywords: Removable appliance, anterior crossbite, pediatric dentistry

PP 01-82**Oral Findings in Dizygotic Twin with Down Syndrome: A Case Report*****Esra Öz, Zuhâl Kırzioğlu, Zeliha Akbulut****Pediatric Dentistry, Faculty of Dentistry, Suleyman Demirel University, Isparta, Turkey*

Introduction: Down syndrome (DS) is one of the most common congenital autosomal anomalies that is seen in 800-1000 births. Dizygotic twins with DS have been rarely seen in about 2.5 million births. In this case report, atypical oral findings of dizygotic twin with DS have been presented.

Case Reports: Down Syndrome diagnosed 5-year-old dizygotic twin males were referred to SDU, Faculty of Dentistry, Department of Pediatric Dentistry by their parents for dental examination. In medical history, it was learned that patients had hypothyroidism and congenital heart disease. In intraoral examination, macroglossia, fissured tongue, tongue thrusting, malocclusions such as diastemas, midline shift, open bite were not observed. Both had deep dentine caries in primary teeth. The dmft scores of patients were 0.45 and 0.4. It was seen that only clinical crowns of upper lateral teeth were conical and the others were normal size. No hypoplastic defects were seen in teeth. According to radiographic examination, both patients had congenitally missing eight permanent teeth (#12, #15, #22, #25, #31, #35, #41, #45). In radiographic examination of the family members, it was observed that their father and 20-year-old sister had congenitally missing teeth (#12, #22). However, congenitally missing tooth in their mother had not been seen.

Conclusions: Typical oral findings common in children with Down syndrome were not seen in this dizygotic twin with Down syndrome. Since there are lots of caries and congenitally missing teeth, the importance of early treatment of these patients is emphasized once again in this case report.

Keywords: Dizygotic twin, Down syndrome, oral findings

PP 01-83**Can We Support The Treatment of TMJ Disorders by Splint: A Case Report**

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Introduction: Temporo mandibular dysfunction is a single clinical entity characterized by a variety of musculo-articular signs and symptoms of the jaw: jaw pain, joint sounds during jaw movements and difficulties opening.

Materials and Methods: This is a clinical study realized at the Blida dental clinic, the female patient 47 years old consulte for a functional and aesthetic motif, her anterior occlusion is inverted and non-functional associated to TMJ disorders. After a complete clinic examination we use axiography (Quick axis of the firm Fag) and occlusal analyze on the SAM II articulator and we decide to begun our therapy by indented splint in centric relation.

Results: The wearing of occlusal splint fabricated in centric relation was for 3 months, there was decrease of pain and articular cracking, occlusion of our patient was reestablished in a central relation, there was mandibular repositioning during therapy, as demonstrated by the change in occlusal contacts on the splint. The prosthesis restoration fixed and removable stabilizes the occlusion and the axiographic registration before and after treatment shows the change of the condylar position following the change of the occlusion of our patient.

Conclusion: The restoration of the both archs by the occlusal splint and the prosthetic restorations allowed to harmonize the mandibular movements and to guarantee a perennial result of the therapy adopted by our team.

Keywords: Prosthodontics restorations, TMJ disorders, axiography, occlusal splint, centric occlusion

PP 01-84**Bleaching of Non-Vital Teeth and Aesthetic Restorative Approaches: Three Case Reports**

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Introduction: Nowadays, both children and adults pay more attention to their appearance. The method of abrasion is the first treatment that comes to mind in teeth with internal discoloration. However, dental bleaching may offer a safer alternative that can be completed with less chair time and without harming dental structures. In these case reports, it was aimed to present the treatment of upper anterior teeth with yellow-brown coloration after canal treatment by bleaching.

Case Reports: After examination of two patients, having esthetic concerns of upper teeth discoloration, with no complaints of hypersensitivity the following indications were identified. A yellow-brown discoloration due to root canal treatment was observed in the upper left central incisor of a 35-year-old male patient in Case 1, in the upper right central incisor of a 40-year-old female patient in Case 2, and in the upper right central incisor of a 32-year-old female patient in Case 3. Bleaching treatment was planned to apply. Carbamide peroxide was used for bleaching. The agent was renewed every two days (whiteness Super-endo, FGM, Brazil). After bleaching application, yellow-brown colorings decreased. Teeth were restored with a nanohybrid composite resin (Clearfil Majesty S2, Kuraray, Japan).

Conclusion: The most important advantage of non-vital bleaching treatment with complications such as cervical root resorption and tooth re-coloration; is to protect the natural tooth structure without need of prosthetic restoration. It was decided to evaluate the patients in periodic clinical and radiological controls regarding possible complications.

Keywords: Anterior aesthetic, devital bleaching, discoloration

PP 01-85**Direct Interproximal Diastema Closure with Composite Layering Technique: Two Cases Report*****Züla Tekiroğlu Yelken, Enes Kılıç, Emine Şirin Karaarslan****Gaziosmanpaşa University Faculty of Dentistry, Department of Restorative Dentistry, Tokat, Turkey*

Aim: Presence of diastema between anterior teeth is often considered an onerous esthetic problem. Various treatment modalities are available for diastema closure. However, not all diastemas can be treated the same in terms of modality or timing. The extent and the etiology of the diastema must be properly evaluated. Proper case selection is of paramount importance for a successful treatment.

Materials and Methods: Clinical examination of the two patients with non-aesthetic complaints due to space in the upper anterior teeth revealed the following. Case A: A 16-year-old female patient complaint of gaps between her anterior teeth after orthodontic treatment. There were composite residues on the teeth's buccal surface. The teeth were vital and gums were healthy. Case B: A 15-year-old male patient with a complaint of non-aesthetic anterior teeth admitted to our clinic. There is discoloration on the buccal surface of 12 tooth. The teeth were vital and gums were healthy. In all two cases, the diastema areas were restored with composite restorative materials, taking the appropriate choice of colors into consideration.

Conclusion: Maintaining an optimum oral hygiene and regular clinical controls are essential in order to have a long-term clinical success and prevent the disadvantages of incremental direct composite resin technique such as marginal discoloration, fracture and possible periodontal problems. This method provides a satisfying esthetic and durability while protecting dental tissues as an alternative to prosthodontic approaches.

Keywords: Aesthetic, diastema closure, direct composite resin

PP 01-86**Surgical Treatment of a Large Dentigerous Cyst*****Umit Ertas, Muhammed Salih Karaavci****Department of Oral and Maxillofacial Surgery, Atatürk University, Erzurum, Turkey*

Introduction: The aim of this study is to present the surgical treatment of a large and asymptomatic dentigerous case. Dentigerous cysts are defined as a cyst originated by follicle of dental crown of a tooth unerupted. Frequently they are seen over a wide age range of 20-30 years old. The incidence of dentigerous cyst in males is higher than female. They are often seen with mandibular third molar, maxillar canine and maxillar third molar teeth. Usually they are diagnosed on routine dental radiographs and there is usually no pain or discomfort associated with the cyst unless it becomes secondarily infected.

Case Reports: A 22-year-old man admitted to our clinic with a complaint of cyst on routine radiography. Radiographic examination revealed that radiolucent lesion associated with mandibular impacted third molar and extended to basis mandibularis. The patient had no complaints in the area concerned. Under local anaesthesia, second and third molars were extracted, the lesion was totally enucleated with its capsule and wound margins were primary closed. After the operation, histopathologic examination confirmed the diagnosis of a dentigerous cyst.

Conclusion: This article describes surgical treatment of a non-syndromic large dentigerous cysts.

Keywords: Dentigerous cyst, surgical treatment

PP 01-87**Comparison of CAD/CAM Materials' Color Stability*****Esra Senlen, Serdar Bağlar****Department of Restorative Dentistry, Faculty of Dentistry, Kirikkale University, Kirikkale, Turkey*

Aim: In-vitro comparison of the color stability on different nanocomposite resin and CAD/CAM materials.

Materials and Methods: CAD/CAM restorative materials Lava Ultimate(3M ESPE), Cerasmart(GC,), VITA Enamik (VITA, Zahnfabrik), VITA Mark II (VITA, Zahnfabrik), IPS e.max CAD (Ivoclar Vivadent), IPS Empress CAD (Ivoclar Vivadent), VITA Suprinity (VITA, Zahnfabrik), and a nanocomposite resin Filltek Ultimate (3M ESPE) were sliced 1mm in thickness. Nanocomposite specimens were packed into a steel mold. The color measurements were performed with a spectrophotometer. The specimens were thermocycled respectively 1000 and 5000 cycles and then all the materials were exposed the coffee solution respectively for one week and four weeks. ΔE formula was calculated. The results were assessed using a Kruskal Wallis, Mann Whitney U, Wilcoxon Test ($p=0.05$).

Results: Regarding the analysis of color differences, significant differences in ΔE values were detected ($p<0.001$).

The highest color change was seen in the nanocomposite resin ($\Delta E=9.28$) and the color change was beyond clinical acceptability for Filltek Ultimate($\Delta E=9.28$), Lava Ultimate ($\Delta E=6.12$), Cerasmart ($\Delta E=4.68$), Vita Enamik($\Delta E=4.15$) and Vita Mark II($\Delta E=3.35$) materials. The least color differences (ΔE) were 2.57 for IPS emax, 2.94 for Vita Suprinity and 3.07 for IPS Empress materials.

Conclusion: The highest color changes were found above the clinically acceptable limit in Filltek Ultimate, Lava Ultimate, Cerasmart, Vita Enamel and Vita Mark II, respectively. In contrast, IPS e.max remains at clinically acceptable limits in Vita Suprinity and IPS Empress. This study was supported by Kirikkale University Scientific Research Project Office.

Keywords: CAD/CAM materials, color stability, stainability

CLINICAL POSTERS

MARCH 7, 2018 WENDESDEY

PP 02-01

Influence of Polishing Techniques on The Surface Roughness of Hybrid CAD/CAM Materials

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Aim: The purpose of this study was to measure the surface roughness of hybrid computer-assisted design/computer assisted machining (CAD/CAM) restorations using several polishing techniques.

Materials and Methods: Two hybrid CAD/CAM materials (GC Cerasmart and Vita Enamic) and 5 polishing techniques were tested. One hundred specimens were prepared by cutting blocks into standardized pieces of 12x 10x 1 mm (n=10). The specimens will be randomly divided into five polishing techniques: 1) Control group: unpolished composite resin surface, 2) Optiglaze, 3) Occlubrush, 4) Prisma Gloss and 5) Gradia diapolisher. Polishing quality was measured with a profilometer (Ra values). Six measurements were taken for each sample. The data were statistically analyzed using analysis of variance (ANOVA) and Tukey's test ($\alpha = 0.05$).

Results: The mean (\pm SD) roughness values obtained for GC Cerasmart were: $0.6 \pm 0.02 \mu\text{m}$; $0.58 \pm 0.13 \mu\text{m}$; $0.31 \pm 0.08 \mu\text{m}$; $0.32 \pm 0.08 \mu\text{m}$; and 0.31 ± 0.03 . For Vita Enamic, the mean (\pm SD) roughness values were: $0.52 \pm 0.04 \mu\text{m}$; $0.61 \pm 0.17 \mu\text{m}$; $0.5 \pm 0.1 \mu\text{m}$; $0.37 \pm 0.06 \mu\text{m}$; and $0.45 \pm 0.18 \mu\text{m}$. On GC Cerasmart, Occlubrush exhibited lower Ra values than Vita Enamic ($p < 0.05$). Optiglaze polishing technique was not effective at reducing surface roughness of both hybrid CAD/CAM materials ($p < 0.05$).

Conclusions: The surface roughness of hybrid CAD/CAM materials can be affected by the material type and the applied surface polishing techniques.

Keywords: CAD/CAM materials, polishing techniques, surface roughness

PP 02-02

Effect of a New Toothpaste Containing Ginger on Early Enamel Lesions

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Aim: With the progress of science, the use of plant extracts as an alternative treatment source becomes increasingly important as the pharmaceutical properties of plants are revealed.

In our study we compared the remineralizing effect of a natural product, ginger honey mixture, with microhardness and scanning electron microscopy findings in lesions in different depths.

Material and Methods: Enamel samples taken from teeth that meet certain criteria were separated into 3 groups (n =35) and stored at different times in demineralization solution. The lesions were then divided into 3 subgroups (n=10). One group was held for control purposes only in an artificial saliva solution and another group was brushed with toothpaste containing NaF at certain intervals and mixture of toothpaste containing ginger and honey was applied the last group (Gumgumix, Beka ilaç, Türkiye). After remineralization and demineralization, samples were examined by Scanning Electron Microscopy and microhardness values were measured.

Results: When the change after remineralization in microhardness measurements is analyzed according to the groups; In the second and third remineralization groups, the amount of increase in microhardness in teeth remineralized with toothpaste containing ginger-honey was significantly higher than the other groups. In the third demineralization depth group in the SEM examinations after remineralization, it is seen that after the remineralization with NaF and ginger-honey containing dentifrice, the interstitial areas in the crystal structure are filled and remineralized again.

Conclusions: In conclusion, the application of toothpaste containing ginger-honey showed more remineralization effect in all demineralization depth groups than NaF application.

Keywords: Early enamel lesion, Ginger, microhardness, Remineralization

PP 02-03

Effect of Demineralization Time on Hardness and Depth of an Enamel Caries Lesion: An in Vitro Study**Melek Öztaş¹, Funda Yanıkoğlu², Zeynep Ceren Pehlivan Çelik², Dilek Tağtekin²**¹Faculty of Dentistry of Marmara University, Istanbul, Turkey²Department of Restorative Dentistry, Faculty of Dentistry of Marmara University, Istanbul, Turkey

Aim: Consuming excessive acidic foods, bad oral hygiene, night snacks increase acidic interaction on tooth surface which causes mineral loss on enamel. Our purpose was to investigate the correlation of demineralization time with microhardness and depth of an enamel caries lesion.

Material and Methods: 60 freshly extracted human teeth were mounted in acrylic resin and randomly divided into 5 groups (n=12). After smoothing the surfaces with sandpaper discs, groups were stored in the same demineralization solution (pH=4.35-4.65) respectively with duration of 60/72/84/96/108 hours. Surface microhardness (SMH) was assessed with Vickers microhardness tester using a pyramid diamond tip exerting 100 g load for 15 s. Lesion depths of three specimens out of each group were evaluated from five different demineralized pit under a stereomicroscope. Data were analyzed by two-way ANOVA and post-hoc Tukey HSD tests.

Results: After acid exposure SH values significantly decreased in all groups (p=0.001; p<0.01). The highest SH values were observed in group 1 – 60 hour (mean: 261.64 ± 51.4). Statistically significant differences were shown between all groups in terms of Δhardness (p<0.05). After 72 hours of demineralization, the microhardness values were tend to decrease more as the exposure time increases (p=0.001; p<0.01). The mean lesion depths were varied from 3.45 ± 0.59 μm to 20.74 ± 2.00 μm.

Conclusion: Our findings show that there is positive correlation between duration of demineralization and lesion depth; negative correlation with microhardness. We assume that initial lesions may deepen quickly when patients neglect oral hygiene, especially after 3 days.

Keywords: Microhardness, demineralization time, lesion depth

PP 02-04

Evaluation of Effective Duration of Different Cleanser Tablets Providing Prosthetic Hygiene Care on Some Denture Base Resins**Yeliz Hayran¹, Işıl Sarıkaya¹, Ayşe Uysal¹, Ali Aydın²**¹Gaziosmanpaşa University, Faculty of Dentistry, Department of Prosthodontics²Gaziosmanpaşa University, Faculty of Science and Art, Department of Molecular Biology

Aim: Denture bases behave like antimicrobial agents due to their weak surface interactions with microbial film. However, denture cleaning tablets should be used in addition to cleaning properties of denture base resins. The aim of our study was to evaluate the antimicrobial effects of the denture cleanser tablets using various times against microbial flora on various denture base resins.

Materials and Methods: The surface-roughness of Acron-Hi™, Qc-20™, Meliodent™, and Deflex™ resins was standardized by using a profilometer. The antimicrobial activity of the cleanser tablets (The Polident 3 min™, Sterodent™, and Corega™) against microbial cells (*S. aureus*, *S. mutans*, *S. gordonii*, *E. coli*, *A. actinomycetemcomitans*, and *C. albicans*) on the resins was evaluated by using a MTT protocol. Scanning electron microscopy was used to evaluate the effects of different duration of tablet application.

Results: The SEM results exhibited that there was a significant relationship between time and cleansing tablets in terms of the disposal of biofilms in dentures. According to the MTT assay test results, the tablets significantly inhibited (p < 0.05) viability of all microorganisms tested against all denture resins after 4-6 min at 1 tablet/150 mL of distilled water.

Conclusions: The type of cleanser tablet, the type of resins, and duration of tablet application may directly affect the biofilm formations. The cleanser tablets may be recommended for patients who use any type of denture resins provided that they are administered in 1 tablet / 150 mL distilled water for 4-6 minutes.

Keywords: Denture base resin, denture cleanser tablets, microbial cells

PP 02-05**The Role of Gingival Display on Beauty Perception****Murat Çelikdelen¹, Başak Bıçakçı², Ali Altuğ Bıçakçı³**¹Private Practice²Gaziosmanpaşa University Faculty of Education
Department of Fine Arts Education³Gaziosmanpaşa University Faculty of Dentistry
Department of Orthodontics

Aim: Face esthetic has been evaluated as one of the most important concern since ancient time. Eyes, nose and oral area could be determined as the major components of faces. A beautiful smile contribute to not only beautiful face esthetic but also attractiveness of the person. Smile line, buccal corridors, dental midline, smile symmetry play an important role in attractive smile as well as gingival display. The aim of this study is to evaluate the role of gummy smile and lip line on attractive and beautiful smile.

Materials and Methods: A photo of a patient who has an ideal smile was chosen. Then gum display of 1 to 6mm were constructed and 6 new photographs were obtained. Similarly, the upper lip was lowered 1 to 4 mm in order to achieve lower lip line. These 11 photographs were showed to 88 lay person (44 male 44 female) and requested to fill Likert scale. The data were evaluated statistically.

Results: The results showed that women do not like 2mm and over gingival display during smile. This was 3mm and over among men. Low lip line was evaluated as acceptable for both gender.

Conclusion: As a result of this study, it was observed that the amount of gingival display during smile was an important factor affecting the appreciation of the people.

Keywords: Smile esthetics, gingival display, perception

PP 02-06**Importance of Correct Diagnosis in Oral Health****Burak Gökay Yıldırım, Arzu Beklen**Eskişehir Osmangazi University, Faculty of Dentistry,
Department of Periodontology

Introduction: Clinical differential diagnosis is a conceptual to establish the correct diagnosis. In this report, the patient who was referred with the preliminary diagnosis of idiopathic thrombocytopenic purpura.

Case Reports: A 32-year-old female patient was referred to Eskişehir Osmangazi University faculty of dentistry. She had a palpable lesion on the buccal area of her lateral tooth which had a smooth surface of 0.2x0.2 cm. The palpation of the lesion caused the area to become whitish. Case history and clinical examination did not indicate any bleeding problem. Blood analysis results and thrombocyte levels were normal and we were not able to distinguish thrombocytopenic purpura from preliminary diagnosis. A piece of membrane tissue was excised 0.4x0.2x0.2cm under infiltration anesthesia and gingivoplasty was performed. Pathologic examination indicated chronic inflammatory cell infiltration and occasionally increased neutrophilia and vascularity in the stroma, resembling normal inflammation in periodontal tissues.

Conclusions: To conclude a correct preliminary diagnosis for the patients with idiopathic thrombocytopenic purpura obtaining a blood count and a good anamnesis must be an essential point. Thrombocytopenic purpura is a hematologic disease characterized by decreased peripheral blood platelets. Oral lesions are usually reddish lesions, ecchymoses or even hematomas in the appearance of buccal mucosa and palate petechiae. Spontaneous gingival bleeding is another early manifestation. In our case the critical clinical analyzes and lab test results made us free to exclude purpura possibility and we removed the lesion.

Keywords: Idiopathic thrombocytopenic purpura, oral pathology, blood analysis.

PP 02-07

A New Treatment Approach in Agenesis Cases: CAD/CAM System

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Introduction: The aim of this study is describe the treatment of primary molars with a deep carious lesion by root treatment and placement of a hybrid ceramic endocrown. Hypodontia is more common in the permanent than primary dentition. The most frequent missing teeth are the third molar, the second premolar and the upper lateral incisor respectively. The prevalence of the congenital absence of lower second premolar is between 2.4-4.3%. After oral hygiene is provided in the treatment planning, ideal occlusion should be obtained and aesthetic problems should be solved.

Case Report: A five-year-old female patient with profound caries in tooth number 75 and a nine-year-old male patient with profound caries in tooth number 85 referred to Istanbul University Faculty of Dentistry, Department of Pediatric Dentistry. Clinical and radiographic examination revealed that mandibular second premolar teeth were congenitally deficient in both patients. Root canal treatments were performed and then endocrowns were planned with CAD/CAM technology (CEREC system) and material used Cerasmart (GC) for primary second molars. Over the 6-month follow-up, no pulpal or periradicular pathology was observed on the radiographs. When the endocrowns were taken into consideration, the marginal fit was excellent, the anatomical form was protected and no discoloration occurred.

Conclusion: It is crucial to keep primary second molar in absence of permanent second premolar. Endocrown is a suitable treatment option for dental restorations in pediatric dentistry.

Keywords: CAD/CAM, Cerasmart, endocrown, pulpectomy, agenesis

PP 02-08

Dental Management of a Child with Dentinogenesis Imperfecta Associated with Osteogenesis Imperfecta: A Case Report

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Introduction: Dentinogenesis imperfecta (DI) is an inheritable disorder of tooth development that occurs during the histodifferentiation stage. DI results in structural defects in dentin formation in the deciduous and permanent teeth. It can be subdivided into three basic forms: Shields types I, II and III. Shields type I occurs with osteogenesis imperfecta (OI). OI, also known as "brittle bone disease", is a genetic disorder that affects the connective tissues. A person with OI experiences recurrent, multiple bone fractures. Abnormalities frequently seen in patients include blue sclera, weak joints, easily bruising, deficient growth, short stature, DI and spinal curvature. This clinical report presents the clinical manifestations and management of a 8-year-old child diagnosed with OI and DI.

Case Report: An eight-year-old boy with osteogenesis imperfecta and dentinogenesis imperfecta presented to the Department of Pediatric Dentistry, Dental School, Marmara University complaining of brown discoloration of his teeth. The treatment plan set up for this patient had the aim of preserving the tooth structures because of their susceptibility to marked wear of the tooth crowns. Dental treatment included the use of composite resin restorative materials and stainless-steel crowns. Fluoride therapy was administered, and oral hygiene instructions were given.

Conclusion: OI is a heritable systemic disorder with DI as its dental counterpart. It is essential for clinicians to be familiar with different medical and oral aspects of OI. Children with OI should be examined as soon as teeth are erupted to prevent loss of tooth structure and seen frequently to restore any new enamel fracture and maintain their oral health.

Keywords: Brittle bone disease, dentinogenesis imperfecta, osteogenesis imperfecta

PP 02-09

Relationship Between Obesity and Temporomandibular Joint Dysfunction: Epidemiological Study***Sevcihan Günen Yılmaz¹, Ibrahim Şevki Bayrakdar²***¹*Akdeniz University, Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Antalya, Turkey*²*Osmangazi University, Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Eskişehir, Turkey*

Aim: The aim of this study was to evaluate the relationship between TMJD and obesity, developed by Fonseca and evaluated according to the questionnaire, and scoring ten questionnaires and investigating whether obesity is a risk factor for TMJD.

Material and Methods: The study population consisted of 225 patients (Female: 137 [60.9%] / Male: 88 [39.1%]) who applied to the Department of Oral and Maxillofacial Radiology of Akdeniz University, Body mass index (BMI) of patients were calculated. The questionnaire developed by Fonseca et al. was used to determine TMJD and score. The data were analyzed using SPSS software (SPSS Inc, Chicago, Illinois, USA), P: <0.05 was considered significant.

Results: Non-TMJD patients were seen in 21.2% of males and 34.1% of females, respectively. The proportion of patients with TMJD was higher in women than in men, but this ratio was not statistically significant (P: 0.06). In patients with BMI 18-24.9, the proportion of non-TMD patients was 28.9% and the proportion of patients without TMD was 15.0% in patients with BMI 30-34.9. When the patients with BMI <30 (Group 1, n = 201) and those over 30 years (Group 2, n = 24) were evaluated, the rate of patients without TMED was 29.3% in Group 1 and 12.5% in Group II (P: 0.03).

Conclusions: Obesity may be a risk factor for TMJD. With increased BMI, the incidence of TMJD is increasing.

Keywords: Obesity, temporomandibular joint, fonsenca questionnaire

PP 02-10

Drug-induced Gingival Overgrowth Associated with The Use of a Calcium Channel Blocker (Amlodipine): 6 Months Follow-Up Case Report***Hacer Sahin Aydinyurt, Cem Taskin****Van Yuzuncu Yil University, Faculty of Dentistry, Department of Periodontology, Van, Turkey*

Introduction: Calcium channel blocker drugs used in patients with hypertension may cause gingival overgrowth. In this case report, a 68-year-old male patient with gingival enlargement due to the use of calcium channel blocker is presented at 6 months follow-up after periodontal treatment.

Case Reports: A 68-year-old patient with hypertension admitted with the complaint of gingival overgrowth to Yuzuncu Yil University, Faculty of Dentistry, Department of Periodontology. The patient stated that he used calcium channel blocker (amlodipine) for 20 years ago. The patient declared that gingival enlargement complaint was started at 18-19 years ago. After the first examination the patient was consulted to the cardiologist for drug replacement. As a result of the consultation, the patient's medication was replaced with the beta blocker (nebivolol). Scaling and root planing was made under local anesthesia then oral hygiene training was given to the patient. In the distal site of 23, periodontal pathological pocket was found after 21 days of root planning and flap surgery was applied. 26 was extracted and then fixed/removable prosthesis was made. After the periodontal and prosthetic treatments the patient was taken into the supportive therapy.

Conclusions: After 6 months of follow-up, gingival enlargement became normal size without the need for gingivoplasty. Treatment of drug-induced gingival overgrowth includes cessation or replacement of the drug and decreasing other risk factors with meticulous mechanical and chemical plaque control.

Keywords: Drug-induced gingival overgrowth, hypertension, amlodipine

PP 02-11

The Evaluation of Effect of MTA- Caps and Pro Root MTA on Human Pulp Cell Viability**Cemile Kedici Alp¹, Ferda Alpaslan Pınarlı², Yunus Alp², İhsan Yıkılğan¹**¹Department of Restorative Dentistry, Gazi University, Ankara, Turkey²Medical Genetics Center, Yıldırım Beyazıt Training and Research Hospital, Ankara, Turkey**Aim:** The aim of this study was to compare the biocompatibility of newly developed fast setting calcium silicate cement (MTA-Caps) and ProRoot MTA by using human dental pulp cells.**Materials and Methods:** MTA-Caps and Pro Root MTA were prepared according to manufacturer's instruction under sterile conditions. Biocompatibility was assessed by MTT assay. The treated cells were incubated with MTT assay solution. Absorbance was measured in an enzyme-linked immunosorbent assay (ELISA) reader at 595 nm.**Results:** MTA- Caps and Pro Root MTA exhibited similar good biocompatibility. Dilutions were affected the biocompatibility of two materials.**Conclusion:** Within the limitation of this study, MTA-Caps has not got negative effect on human pulp cells. This study was supported by University of Gazi University**Keywords:** Biocompatibility, MTA Caps, pulp capping

PP 02-12

Effects of Diode Laser Irradiation on Dental Pulp in Rats**Cigdem Guler¹, Hilal Alan², Pinar Demir³, Nigar Vardi⁴**¹Department of Pediatric Dentistry, Faculty of Dentistry, Ordu University, Ordu, Turkey²Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Inonu University, Malatya, Turkey³Department of Pediatric Dentistry, Faculty of Dentistry, Inonu University, Malatya, Turkey⁴Department of Embryology and Histology, Faculty of Medicine, Inonu University, Malatya, Turkey**Aim:** To evaluate the effects of different power densities of diode laser on dental pulps in rats.**Materials and Methods:** In this study used the maxillary central incisors (n=80 teeth) of the 20 adult male Wistar albino rats. Rats were randomly divided into four groups according to power densities of diode laser (n=10 teeth). Group 1 (G1): No treatment (control), G2: irradiated with 15 J/cm² (0.3 W), G3: irradiated with 30 J/cm² (2 W), and G4: irradiated with 60 J/cm² (4 W). The animals were euthanized on 7th days after laser treatment, and all maxillary central incisors were extracted surgically. Then the teeth were submitted to histology. The sections stained with hematoxylin and eosin. Histopathological changes in pulp and height of odontoblast layer were examined histological. All data were compared statistically using Mann - Whitney U test, P<0.05.**Results:** The pulps of the G1 showed normal histological structure. The pulps of the G2 displayed slight histopathologic alterations such as odontoblast cell disorganization and irregularities in cell extensions. Alterations were more prominent in the G3 than G2. The lowest odontoblast layer was measured in the G4, the difference in height of odontoblast layer among the groups was not found to be statistically significant (P>0.05).**Conclusion:** As long as used in accordance with the recommended procedure, the diode laser can be safely use in dental hard tissues.**Keywords:** Dental pulp, diode laser, rat

PP 02-13**Cone-Beam Computed Tomography Exploration and Treatment of Impacted Mesiodens****Deniz Sila Özdemir¹, Ahmet Altan², Halenur Altan¹**¹Department of Pediatric Dentistry, Faculty of Dentistry, Gaziosmanpaşa University, Tokat, Turkey²Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Gaziosmanpaşa University, Tokat, Turkey**Introduction:** Mesiodens is a term for supernumerary teeth present in the premaxilla between the two central incisors. They can occur in both maxilla and mandibula.**Case Reports:** A 10 years old male patient referred to the Pediatric Dentistry Department of Gaziosmanpasa Dentistry Faculty with a chief complaint of "delayed upper anterior tooth". The patient had no other dental problems. The patient presented with no relevant medical history. Intraoral examination revealed the space instead of 11 number tooth. Intraoral periapical radiography and orthopantogram revealed one immature crown with adjacent impacted 11 number tooth in eruption path. CBCT exam of the maxilla to assist in localization and orientation of the mesiodens. Axial sections images revealed horizontal impaction of 11 tooth number, and cross-section oblique images revealed impacted permanent maxillary central incisors, as well as the relationship with the adjacent teeth and structures. The surgical technique was performed under local anesthesia.**Conclusions:** Early diagnosis of mesiodens is important to prevent complications.**Keywords:** Cone-beam computed tomography, delay eruption, mesiodens**PP 02-14****Perhaps, There Is a Last Chance Before Extraction****Özgür Doğan¹, Edanur Gökçe Meydan¹, Suat Serhan Altintepe Doğan², Ismail Haktan Çelik¹**¹University of Afyon Kocatepe, Faculty of Dentistry, Department of Paediatric Dentistry, Afyon, Turkey.²University of Afyon Kocatepe, Faculty of Dentistry, Department of Periodontology, Afyon, Turkey.**Introduction:** Between adolescents the most common dental problem is dental pain which is caused by tooth decay. For treatment of this problem; the painful tooth can be treated in a wide range from filling to extraction. Nevertheless we encounter teeth that can't be restored frequently. In such cases the most appropriate solution for adult patients is tooth extraction afterwards recomplete the dentition as making a suitable dental prothesis. Encountering this situation at adolescent individuals who are undergoing growth development is a challenge. After tooth extraction space maintaining is critical for making an ideal prosthetic treatment in the future. But growth development has to halt in order to rehabilitation. Classical treatment plan is making a space maintainer and waiting at these cases. Even so this solution can't be prevented alveolar bone resorption which is a handicap for placing implants.**Case Report:** Two adolescents patient who were 12 and 13 years-old were referred to our clinic with the complaint of dental pain. These patients had non-restorable molar teeth. We decided to extract these teeth roots which was below of gingival margin by hemisection procedure. After gingival contouring, we were performed root-canal treatment and placed fiber reinforced post. After preparation of these weak structures, were fixed porcelain crowns.**Conclusions:** We aim that a tooth supporter, a restored dentition, a space maintainer and decreased bone resorption by performing this kind of treatment strategy. We have been following these patients for nine months. But we believe that have to be followed up for more period.**Keywords:** Hemisection, space maintainer, adolescent

PP 02-15

Treatment of Tooth Discoloration After Endodontic Treatment: 6-Month Follow-Up***Elif Akkol, Esin Özlek****Department of Endodontics, School of Dental Medicine, University of Van Yüzüncü Yıl, Van, Turkey*

Introduction: Discolorations which occur on teeth for various reasons may lead to aesthetic problems especially in the anterior region. In the treatment of discoloration, bleaching treatment with correct diagnosis can be applied before the invasive methods such as aesthetic crown prosthesis.

Case Report: A 33 year old female patient's right upper lateral tooth was treated 3 years ago with root canal treatment. One year ago, the patient noticed an increasing discoloration and applied to our clinic. As a result of clinical and radiological examinations, it was determined that the tooth was asymptomatic. In order to decrease the discoloration, it was decided to apply bleaching with 'walking bleaching' technique. The composite restoration was completely removed and the pulp cavity was opened. Powdered sodium perborate was prepared by mixing with distilled water and placed in the pulp cavity with moist cotton pellet. The cavity was temporarily closed with a light-curing composite resin (Gradia, Tokyo, Japan). On the fourth day, it was seen that the discoloration was eliminated and tooth color was compatible with others which was sufficient. Clinical and radiological examinations performed 6 month later showed that the tooth was asymptomatic.

Conclusion: In discolored teeth; bleaching treatments can be performed with the correct indication before invasive methods such as all ceramic crown, composite, porcelain laminates and porcelain-metal crowns. In this way, both the aesthetic expectations of the patient would be met and the natural tooth structure would be preserved.

Keywords: Devital bleaching, sodium perborate, discoloration

PP 02-16

Dosimetric Evaluation of the Effect of Dental Restorative Materials in Head and Neck Radiotherapy***Elif Aybala Oktay¹, Tamer Zerener², Bahar Dirican³, Selda Yıldız⁴, Ömer Sağsen³, Serpil Karaoğlanoğlu¹, Murat Beyzadeoğlu³****¹Department of Restorative Dentistry, University of Health Sciences, Gulhane Faculty of Dentistry, Ankara, Turkey**²Department of Oral and Maxillofacial Surgery, University of Health Sciences, Gulhane Faculty of Dentistry, Ankara, Turkey**³Department of Radiation Oncology, University of Health Sciences, Ankara, Turkey**⁴Department of Anatomy, University of Health Sciences, Ankara, Turkey*

Aim: The aim of our study is to assess the dose enhancement from scattered radiation at amalgam and composite-filled teeth for restoration of occlusal and mesio-occluso-distal (MOD) cavities during simulated head and neck radiotherapy.

Materials and Methods: In this study, we have studied the backscatter effect of conventional amalgam, high-copper amalgam, and resin composite dental restorative materials at cadaver mandible teeth with occlusal and MOD cavity fillings during simulated head and neck radiotherapy using three therapeutic photon energies of 1.25 MeV, 6 MV, and 18 MV to assess the dose enhancement from scattered radiation that may lead to osteoradionecrosis of the lower jaw.

Results: The results showed that backscatter regarding irradiation energy was minimum for 18 MV X-rays, With respect to dental restorative filling material, backscatter was minimum for resin composite filling; whereas regarding the cavity type, our results revealed that backscatter was slightly but not significantly different for all Co 60 (1.25 MeV), 6 MV X-ray, and 18 MV X-ray energies for both occlusal and MOD cavities.

Conclusion: Our dosimetric results suggest that resin composite filling may be recommended in the individualized management of head and neck cancer patients requiring dental restorations with its minimal backscatter to avoid radiation-induced toxicity.

Keywords: Amalgam, radiotherapy, resin composite, TLD100

PP 02-17

Investigation of Mineral Content of Root Canal Dentin After the Application of Various Antibiotic Paste Using Energy-Dispersive X-Ray Detector**Hüseyin Şimşek¹, Münevver Kılıç², Fatih Çakıcı¹, Funda Fundaoğlu Küçükekenci³, Elif Bahar Çakıcı¹, Taşkın Gürbüz²**¹Ordu University Faculty of Dentistry, Ordu, Turkey²Atatürk University Faculty of Dentistry, Erzurum, Turkey³Oral and Dental Health Center, Ordu, Turkey**Aim:** The purpose of this study was to evaluate mineral content of root canal dentin after treatment with different antibiotic pastes including the mixture of metronidazole, ciprofloxacin, doxycycline, cefaclor, amoxicillin or minocycline.**Material and Methods:** Fifty extracted maxillary canine teeth were randomly divided into five groups (n = 10 teeth for each group). Root canals were prepared Reciproc rotary files. Canals were irrigated using 5 ml 5% NaOCl and 1 ml 15% EDTA. Each tooth in all groups were separated longitudinally into two pieces as a control and experimental samples. Each experimental groups received following antibiotic paste; double antibiotic paste (DAP) and triple antibiotic paste (TAP) with doxycycline, TAP with cefaclor, TAP with amoxicillin and TAP with minocycline for 21 days. The Ca, P, Mg, Ca, and K levels and the Ca/P ratio was analyzed by a scanning electron microscope (SEM) equipped with a Bruker energy-dispersive X-Ray (EDX) detector. Data were analyzed with independent samples t-test, one-way ANOVA and Duncan tests.**Results:** Ca and Ca/P ratio showed a statistically significant increase TAP with amoxicillin and cefaclor (P < 0.05). DAP, TAP with doxycycline, and minocycline did not change the mineral levels (P > 0.05).**Conclusion:** TAP with amoxicillin and TAP with cefaclor increased the Ca level and Ca/P ratio of the root canal dentin.**Keywords:** Triple antibiotic paste energy-dispersive spectrometer, mineral level, revascularization

PP 02-18

Digitalization of Impression in Dentistry**Emine Ünal, Faik Tuğut**
Cumhuriyet University, Faculty of Dentistry,
Department of Prosthodontics, Sivas, Turkey**Aim:** In this research, it is aimed to compared advantages and disadvantages of the digital impression method and conventional impression methods in recent years.**Material and Methods:** Documents of digital impressions instrument and equipments have been taken out and studies have been made to investigate the characteristics of each system in order to reach technical equipments in the market.**Results:** When the digital impression methods are compared to the conventional methods in the optical scanning process, they provide the dentist an opportunity without going through a second procedure in the same visit in the tooth preparations with undercut, and in regulating the occlusal distances and the path of placements. Additionally, the increase in marginal compliance of the restoration provides an important clinical advantage. Although digital impressions might seem to be affected by saliva and hemorrhage in the patient's mouth, the impressions can be made healthily by liminating these processes. As a result, the shortening of the duration of treatment and the reduction in the likelihood of failure are thought to contribute to the increase in the success of treatment. It also provides an advantage in the objective assessment of student preparation in the field of education.**Conclusions:** Although digital impression is less error giving method than the conventional impression, there is a need for further improvement.**Keywords:** Digital, impression, conventional.

PP 02-19

The Effect of Placebo, Intracanal Diode Laser Application and Low Level Laser Therapy on The Change of Total Amount of CGRP in Gingival Crevicular Fluid: Split Mouth Study Design**Hakan Arslan¹, Serhat Koseoglu², Ezgi Doganay Yildiz³, Taner Arabaci⁴, Levent Savran², Dursun Anil Yildiz⁴, Gözde Veyisoğlu²**¹Department of Endodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey²Department of Periodontology, Faculty of Dentistry, Izmir Katip Celebi University, Izmir, Turkey³Department of Endodontics, Faculty of Dentistry, Kırıkkale University, Kırıkkale, Turkey⁴Department of Periodontology, Faculty of Dentistry, Atatürk University, Erzurum, Turkey**Aim:** To investigate the effect of a placebo, intracanal diode laser application and low-level laser therapy (LLLT) on the change of the total amount of calcitonin gene-related peptide (CGRP) in the gingival crevicular fluid (GCF) pre- and post-operatively as compared to that of a healthy contralateral tooth (split-mouth study design).**Materials and Methods:** According to the inclusion and exclusion criteria, thirty-nine patients were selected. GCF sampling was performed on a contralateral tooth and experimental tooth (root canal-treated tooth). Root canal treatment was performed on the experimental tooth, and the patients were divided into three groups (n = 13), as follows: placebo (mock laser application), intracanal laser application and LLLT. For the post-operative sample collection, GCF sampling was repeated at the same sites (experimental and control teeth) one week after root canal treatment. The total amounts of CGRP levels in the GCF samples were calculated, and the differences among the experimental and control teeth in terms of the total amount of CGRP were analyzed using the two independent sample t-tests (p=0.05).**Results:** In the placebo group, the total amount of CGRP changes in the GCF before and after the treatment was significantly higher for the experimental tooth than that for control tooth (p<0.05). However, there were no significant differences between experimental and control tooth in the intracanal laser application and LLLT groups (p>0.05).**Conclusions:** Intracanal laser application and low-level laser therapy have immunomodulation effects linked to the modulation of the total amount of CGRP in the GCF.**Keywords:** Calcitonin gene-related peptide, diode laser, gingival crevicular fluid, low-level laser therapy, neurogenic inflammation

PP 02-20

Treatment of a Dental Midline Deviation with Orthodontic Mini Screw Anchorage: A Case Report**Orhan Cicek, Nurhat Özkalaycı**

Bülent Ecevit University, Dentistry Faculty, Department of Orthodontics, Zonguldak, Turkey

Introduction: The aim of this case report is to present the orthodontic treatment of an adolescent male patient with dental midline deviation with mini screw.**Case Report:** A fifteen years old male patient with chief complaint poor dental appearance, crossbite and crowding were evaluated in terms of orthodontics. Orthodontic evaluation revealed that skeletal Class I and dental Class I relationships, severe crowding, dental midline deviation, anterior crossbite and critical overbite. In treatment plan, it was decided to apply fixed orthodontic treatment with permanent upper and lower first premolar teeth extraction. After upper and lower first premolar teeth were extracted, the fixed orthodontic appliance system that called MBT versatile plus was applied. Mini screws were placed. The patient was treated successfully. At the ends of treatment, dental Class I molar and canine relationship was achieved. Upper and lower anterior teeth were aligned to their proper position and dental midline deviation problem was corrected. During fixed orthodontic treatment all teeth were aligned with maximum anchor mechanics by more retraction of anterior teeth and less mesial movement of posterior teeth. All complaints of the patient have been removed. Satisfying esthetic and functional results were obtained.**Conclusion:** Patients with dental midline deviation due to crowding can be treated with fixed orthodontic mechanics. Orthodontic treatment ensures healthier mouth, a more impressive facial appearance and teeth that will stay in mouth for longer.**Keywords:** Dental midline, deviation, mini screw, anchorage

PP 02-21

The Effect of Low-Level Laser Therapy on Total Amount Of Substance P in Gingival Crevicular Fluid: Placebo Controlled Randomized Clinical Trial***Ezgi Doğanay Yıldız¹, Hakan Arslan², Serhat Koseoglu³, Taner Arabacı⁴, Dursun Anıl Yıldız⁴, Levent Savran³***¹*Department of Endodontics, Faculty of Dentistry, Kırıkkale University, Kırıkkale, Turkey.*²*Department of Endodontics, Faculty of Dentistry, Ataturk University, Erzurum, Turkey.*³*Department of Periodontology, Faculty of Dentistry, İzmir Katip Çelebi University, İzmir, Turkey*⁴*Department of Periodontology, Faculty of Dentistry, Ataturk University, Erzurum, Turkey***Aim:** To investigate the effect of low level laser therapy (LLLT) and placebo on total amount of substance P in gingival crevicular fluid (GCF) pre- and postoperatively.**Materials and Methods:** Twenty-six patients having tooth with symptomatic apical periodontitis enrolled in this study. GCF was collected preoperatively. The patients were assigned into two groups (n = 13), as follows: placebo and LLLT. Sampling was repeated 7 days after root canal treatment. Two independent samples T test was used for analysing of the differences between preoperative and postoperative substance P levels in GCF (p = .05). The Pearson correlation analysis was used for determination of correlation among substance P levels and other variables.**Results:** For placebo group, there is no significant difference between preoperative and postoperative total amount of substance P level (p = 0.553). For LLLT group, postoperative total amount of substance P level was significantly higher than those of preoperative level (p = 0.005).**Conclusions:** Within the limitation of the present study, LLLT has immunomodulation effect linked to the modulation of the total amount of substance P in the gingival crevicular fluid.**Keywords:** Substance P, low level laser therapy, postoperative pain, gingival crevicular fluid

PP 02-22

Use of Negative Apical Pressure Technique for Removal of Extruded Gutta-percha Fragment***Hakan Arslan¹, Ezgi Doğanay Yıldız², Ertugrul Karatas¹***¹*Department of Endodontics, Faculty of Dentistry, Ataturk University, Erzurum, Turkey.*²*Department of Endodontics, Faculty of Dentistry, Kırıkkale University, Kırıkkale, Turkey.***Aim:** The aim of this case report was to present using negative apical pressure technique for removal of extruded gutta-percha fragment during retreatment procedures.**Case Report:** A 22 year-old female patient was referred to the Department of Endodontics with severe pain, swelling, and tenderness to percussion and palpation in the left maxillary tooth #14. Periapical radiograph showed previous root canal treatment in tooth #14 with incomplete root canal fillings on both mesial and distal roots. The patient was advised of retreatment. During retreatment procedures a gutta-percha extruded from mesial root canal. The patient was recalled after one day. At the second session, it was observed that the swelling was increased. One of the tips for calcium hydroxide paste application was adjusted to suction of dental unit. Tip was placed into the canal as deep as possible. After a few attempts, extruded gutta-percha was removed and the patient was recalled after one day. At one day from the fragment removal, the swelling was decreased. Calcium hydroxide paste was placed into the canals for one week. At the fourth session, the patient was asymptomatic and the treatment was completed at this session.**Conclusions:** Using negative apical pressure technique provides a safe technique for removal of extruded gutta-percha.**Keywords:** Negative apical pressure, retreatment, gutta-percha

PP 02-23**Spectrophotometric Analysis of Discoloration and Intracoronal Bleaching After Use of Different Antibiotic Pastes****Funda Fundaoglu Küçükkekinçil¹, Fatih Çakıcı²**¹Oral and Dental Health Center, Ordu, Turkey²Ordu University, Faculty of Dentistry, Department of Endodontics, Ordu, Turkey**Aim:** To investigate the color change of teeth caused by containing different antibiotics pastes, and bleached with two different techniques.**Material and Methods:** Extracted maxillary human incisors are used. Six groups have 20 teeth. One of this groups is controlled group no treatment. Five pastes having different antibiotics (ciprofloxacin, metronidazole, minocycline, cefaclor doxycycline and amoxicillin) are placed to root of the other 5 groups. Spectrophotometric measurements were obtained firstly in the beginning, then on the 1th, 2th and 3th weeks after the placement of the paste. The specimens discolored by antibiotics pastes were then divided into two subgroups. The subgroup 1 called walking bleaching and the subgroup 2 called thermophotobleaching with Nd-YAG laser. Spectrophotometric measurements were obtained, firstly in the beginning, then on the 4th, 8th and 12th days after the placement of the bleaching materials. Data were collected based on the CIELAB-CIE1976 (L*a*b*) system and analyzed using the one-way analysis of variance and post-hoc Tukey's test ($\alpha = 0.05$).**Results:** According to the total color differences between 2 colors (ΔE) all groups showed color changes exceeding the perceptibility threshold at all time points except the control group and double antibiotics paste groups ($\Delta E > 3.46$). Triple antibiotics paste with minocycline, induced the most severe coronal discoloration (32.42). When the ΔE is examined thermophotobleaching (22.01 ± 8.23) causes more whitening than walking bleaching (19.73 ± 5.73) at every time ($p < 0.05$).**Conclusion:** Except the double antibiotics paste, all antibiotics pastes cause discoloration. Intracoronal bleaching with Nd-YAG laser can be useful for bleaching this discoloration.**Keywords:** Antibiotics paste, discoloration, bleaching, Nd-YAG laser, spectrophotometre**PP 02-24****The Perception of Young Adults About The Influence of Tooth Loss on Their Quality of Life****George Ion, Rodica Luca, Stefan Milicescu**

Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

Aim: To assess the perception of young adult patients (YAP) regarding the impact of partial edentation (PE) on their quality of life (QoL).**Material and Methods:** Subjects were selected from patients attending a private dental office in Bucharest (Romania) between 2014-2016. Inclusion criteria: age 18 to 35 years, at least one PE. Patients were clinically examined and completed a questionnaire about: I. Socio-demographic data; II. How the presence of PE influenced their QoL (couple life, social interactions, chances of employment). Variables taken into account: gender, place of residency, education level, topography of missing teeth (anterior/posterior). Statistical analysis was performed (t-Student and ANOVA tests, $p < 0.05$).**Results:** 256 patients (mean age = 26.17y) were selected: 109(42.6%) male, 147(57.4%) female (NS); 190 patients (74.2%) came from urban areas; 153(59.8%) had high-school education. 511 PE were found: 471(92.17%) posterior, 40(7.83%) anterior. The mean number of PE per patient was 1.99 (male/female: 2.16/1.87; NS). 248(96.9%) patients stated that PE changes their appearance, 226(88.3%) felt impaired mastication, 189(73.8%) stated altered phonation. SS differences were found between genders regarding perception of speech ($p = 0.006$). Missing front teeth had a greater impact on QoL for urban patients ($p < 0.05$). Impact of missing teeth on the chance of employment was correlated with the level of education ($p = 0.001$).**Conclusions:** Although most missing teeth were located in the lateral areas, almost all YAP felt their appearance was impaired. Anterior edentations' impact on QoL depends on the place of residency and education level of YAP.**Keywords:** Young adult, partial edentation, quality of life

PP 02-25**Hygiene Applications in Implant Prostheses****Bilal Holođlu, Işıl Sarıkaya***Gaziosmanpaşa University Faculty of Dentistry
Department of Prosthodontics, Tokat, Turkey*

Introduction: Nowadays, implant treatments are an important alternative treatment for patients in dentistry. The indications for implant treatment, the choice of implant type and the correctness of superstructure planning as well as the optimum hygiene and routine patient follow-up can affect the result success. While implant protheses are selected as a treatment option, it is not only the application of the implant and the completion of the upper body, but also the patient's hygiene methods should be informed and routine checks should be made after the treatment. Different methods are used in the hygiene of implant-fixed and removable dentures, new hygiene systems are being developed every day.

Case Report: In this case report, the follow-up of oral hygiene of the patient rehabilitated with implant-supported overdenture prosthesis is described. The patient's oral hygiene was provided with pressurized water hygiene systems during follow-up.

Conclusions: Pressurized water hygiene systems are a reliable method of ensuring hygiene of implant prostheses in cases who hand manipulation is not sufficient.

Keywords: Dental implant, implant prostheses, oral hygiene

PP 02-26**Effect of Multi-Walled Carbon Nanotube Incorporation to Glass Ionomer Cements on Surface Roughness and Microhardness: A Pilot Study****İdil Akmeriç, Elif Sungurtekin Ekçi***Pediatric Dentistry, Faculty of Dentistry, Yeditepe University, Istanbul, Turkey*

Aim: The aim of this pilot study was to evaluate the surface roughness and microhardness of conventional glass ionomer cements (GIC) and multi-walled carbon nanotube (MWCNT) incorporated GIC for potential improvements in physical effects.

Material and Methods: A total of 28 disc-shaped experimental specimens were fabricated by adding different ratios (Group 1: 1wt%, Group 2: 2wt%, Group 3: 3wt%) of MWCNT into a commercial GIC powder. Conventional GIC specimens were assigned as the control group. After incubating for 24h at 37°C in 100% humidity, surface roughness values of each group were measured under a profilometer and microhardness values of each were recorded using a Vickers hardness tester. Data were analyzed with one-way ANOVA and for the comparison among groups, Tukey multiple comparison test was used ($p < 0.05$).

Results: The mean values of surface roughness between all groups were found statistically significant ($p = 0.016$). Group 3 showed greater roughness than the control group ($p = 0.009$). Surface roughness values of Group 1 and 2 were similar to that of control group ($p > 0.05$). Microhardness records revealed a significant difference between all groups ($p = 0.016$) with the control group had greater hardness values than Group 2 and 3 ($p = 0.047$, $p = 0.014$). Group 1 revealed greater hardness values than Group 2 and 3 ($p = 0.046$, $p = 0.025$) with no significant difference from the control group ($p > 0.05$).

Conclusion: Results of this pilot study revealed that incorporation of 1wt% MWCNT have physical properties comparable to conventional GIC. Further *in vitro* studies on the other physical properties of GIC need to be carried out in order to use MWCNTs in dental restorative materials.

Keywords: Carbon nanotubes, glass ionomer cements, microhardness, surface roughness

PP 02-27

The Occluso-Prosthetic Concept in Implantology**Mahchouche Hafida¹, Boukais Hamid², Zenati Latifa²**¹University of Algiers, Algeria²University of Blida, Blida, Algeria

Aim: Improved implant surgery procedures and pre-implantation investigations have helped to increase the success rate of dental implants by enhancing osteointegration and stability. We have now entered the era of occluso-integration which ensures the sustainability of our implant restorations but an important question that requires reflection: "Which occlusal concept to choose and for which clinical case? "

Materials and Methods: Seven Patients were treated by supra-implant prosthesis, whatever the extent of a rehabilitation and whatever the type; it must necessarily seek an optimization of the occlusal functions since it is the position of The future prosthesis that guides the position of the implant.

Result: The key to the success of the implant is how the forces are transmitted to the interface between the bone and the implant. Occlusal overloads induce two major complications: fatigue of the metal constituting the implants, the signs are unscrewing, twisting or fracture of the screws, fractures of implants or the overlying prosthesis; and marginal bone loss. These occlusal overloads, harmful both in intensity and direction, are due to two factors: initial errors in the occluso-prosthetic design and the evolution of the occluso-articular system over time. These factors can be broken down into: Differential mobility between teeth and implants coupled with poor balance of the occlusal contacts in static and dynamic, Interference, poor management of occlusal curves. Mutual protection and anterior disclusion have come to be considered as acceptable therapeutic modalities.

Conclusions: Although the subject is serious but simple rules and an approach with common sense can clarify it.

Keywords: Implantology occlusion, peri-implantitis, occlusal concept.

PP 02-28

An Investigation of Shear Bond Strength on Caries Affected Dentin Surface**Merve Agaccioglu¹, Emine Sirin Karaarslan², Fatma Aytac³**¹Restorative Dentistry²Gaziosmanpasa University, Department of Restorative Dentistry, Tokat, Turkey³Abant Izzet Baysal University, Department of Restorative Dentistry, Bolu, Turkey

Aim: In this study, it was aimed to compare the bond strength of a fiber reinforced composite resin with traditional and bulk-fill composite resins on caries affected dentin surfaces.

Materials and Methods: 120 third molar teeth were isolated with an acid resistant nail varnish and stored in a demineralisation solution (pH 4.5). After mechanical removal of the varnish teeth were buried in acrylic resin blocks. For every composite resin group, the specimens were prepared with diamond burs. Then the specimens were divided into three adhesive system (Adper Single Bond 2 (3M ESPE, USA), Clearfil SE Bond (Kuraray Europe GmbH, Germany), Clearfil Tri-S Bond Plus (Kuraray Europe GmbH, Germany)) applications followed by composite resin restorations (Filtek Z250 (3M ESPE, MN, USA), G-aenial Posterior (GCCorporation, Japan), SonicFill 2 (Kerr, USA), Ever X Posterior (GC Europe N.V, Belgium) (n=10). Shear bond strengths were measured using a universal testing device and failure types were determined with stereomicroscope images. SEM images were obtained in x 1000 magnification. Two-way Anova analysis and Bonferroni correction were used relatively for main effects and multiple comparisons (SPSS Statistics 20). p<0.05 was considered as statistically significant.

Results: Adhesive system and composite resin difference affected the bond strength results significantly (p<0.05). EverX Posterior showed the highest bond strength results when used with SE Bond (24,54±1,29).

Conclusions: It was possible to say within the limitations of this study, fiber reinforced composite resin had successful bond strength results. This work was supported by the Gaziosmanpasa University Scientific Research Projects Commission. (Project No: 2016/42)

Keywords: EverX posterior, caries affected dentin, bond strength

PP 02-29

Influence of Different Light-Curing Units on Monomer Elution from Bulk Fill Composites**Muhammet Karadaş¹, Ömer Hatipoğlu², Havva Er¹, Emine Akyüz Turumtay¹**¹Recep Tayyip Erdoğan University²Kahramanmaraş Sütçü İmam University**Aim:** This in vitro study assessed the effect of different light-curing units on the elution of monomers from bulk fill composites with different thicknesses.**Materials and Methods:** Five bulk fill composites (Filtek Bulk Fill Flowable, SonicFill 2, SDR, Tetric N-Ceram Bulk Fill, and Venus Bulk Fill) and one conventional composite (Filtek Z250) were selected for the study. The cylindrical specimens in thickness of 2 mm or 4 mm were prepared and photopolymerized for 20 s with a light-emitting diode (VALO Cordless) or a halogen (Monitex BlueLuxer) light-curing unit. The specimens in glass vials were covered with a 75% ethanol/water solution and stored in an incubator at 37 °C. Ethanol/water extraction solutions were collected for HPLC analysis after 24 h, 3 days, and 7 days. Bis-GMA, TEGDMA, Bis-EMA, and UDMA were eluted from extraction solutions. The data were analyzed with repeated measures and two-way ANOVA ($\alpha = 0.05$).**Results:** The highest amount of residual monomer was detected from the 4 mm thick Tetric N-Ceram Bulk Fill. The light-emitting diode induced lower monomer release from all materials except Tetric N-Ceram Bulk Fill. Significant differences in monomer elution were observed between thicknesses of 2 mm and 4 mm for all composites. SonicFill 2 showed the highest increase in monomer elution with increasing thickness, whereas Venus Bulk Fill showed the lowest increase.**Conclusions:** Light-curing unit type, regardless of thickness, may affect monomer release from composites. The amount of residual monomers is highly associated with resin ratio and crosslinking network of the composites.**Keywords:** Light curing units, Bulk fill, HPLC, Thickness, Composite resin

PP 02-30

Efficacy of Diode Laser in Management of Oral Lichen Planus**Müge Cına Aksoy**

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Introduction: Oral lichen planus (OLP) is a chronic inflammatory disease with unknown etiology. Numerous drugs have been used with dissimilar results, but treatments are usually symptomatic and without definite cure. Topical and systemic corticosteroids are the most widely accepted treatment option for OLP. But the long term use of corticosteroids has numerous disadvantages like secondary candidiasis and adrenal insufficiency. The lasers are used as an alternative modality for treatment of OLP with their advantages like non-pharmacologic, non-invasive clinical application with analgesic, antiinflammatory and biositumilating effects.**Case Report:** A 60 years-old woman with OLP lesions was treated using diode laser (940 nm) for the symptomatic complaints of burning and pain. The treatment was performed twice a week for 5 weeks and the patient showed complete remission of burning and pain. The follow-up was performed for 12 months and no recurrence was found.**Conclusions:** Laser therapy can be used as alternative or additional treatment method without any adverse effects caused by topical or systemic corticosteroids. Diode laser is very effective in providing symptomatic relief of burning and pain in OLP patients.**Keywords:** Diode laser, oral lichen planus, pain

PP 02-31**The Stress Distribution Evaluation of Two Different Post Types Which Used in Complicated Crown-Root Fractures with Finite Element Analysis****Abdullah Emre Karaal¹, Mehmet Sinan Doğan², Osman Atas³**¹Special Dental Clinical, Hatay, Turkey²Harran University, Faculty of Dentistry, Department of Pediatric Dentistry, Şanlıurfa, Turkey³Firat University, Faculty of Dentistry, Department of Pediatric Dentistry, Elazığ, Turkey

Aim: The aim of this study is to evaluate the stress distribution of 2 different post types under the artificial forces that imitate masticator forces by finite element analysis method.

Materials and Methods: The analyses of 2 different post types were performed with finite element analysis method. Two working groups were created. First group includes glass fiber post and the second group includes carbon fiber post. The post types were placed to the root canals and 100N force was applied with 90 degrees angle from the incisal edge of the teeth. 100N force was expanded to whole structures of the teeth. Finite element stress analysis method was used in order to evaluate the stress and to obtain three-dimensional model. Analyses were done with ANSYS program.

Results: In the study, glass fiber post was 5.1049e5-7.0225e7 under the artificial forces, while carbon fiber post was 5.1107e5-6.9851e7. The stresses were concentrated mostly at the palatal regions of both teeth.

Conclusion: The resistance of glass fiber post against the forces was higher than carbon fiber post. In fractured anterior teeth, glass fiber post system is esthetical than carbon fiber post system.

Keywords: Dental trauma, glass fiber post, carbon fiber post, FEM

PP 02-32**Labial Movement of Palatopositioned Anterior Teeth with Fiber Post Systems****Rabia Bozbay, Mehmet Uğur, İdris Kavut**

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Introduction: Malpositions as palatoversion and palatoposition can be seen eruption to palatin upper teeth during dentition. Malpositions can occur depending on various reasons like congenital factors, the lack of space, early deciduous tooth loss or lateness of permanent teeth and can influence aesthetic, phonetic and psychological states of patient negatively. Orthodontic treatment is the most conservative approach among the treatment options. Some patients are not be persuaded orthodontic treatment because of economic reasons and time requirements. In this situation it is alternatively possible to bring the teeth into position using fiber post systems.

Case Reports: In these case series, the treatments applied to bring the lateral and canine teeth to the proper place in two different patients were discussed. Both patients were not persuaded for orthodontic treatment. Endodontic and prosthetic plans were made to recuse the teeth from the extraction. After the endodontic treatment, the teeth were treated with fiber post systems and crowns were partially removed in labial position and treatments were finished. In this way the teeth were brought close to the proper position.

Conclusions: Orthodontic treatments must be first option in malposition situations. If patients reject orthodontic treatment, they can be treated using fiber post systems without costly situations as implant and prosthetic treatments or tooth extraction in malposition anomalies.

Keywords: Tooth malposition, rehabilitation of palatoposition, fiber posts

PP 02-33**Regional Tooth Agenesis Associated with Syndactyly-Clinodactyly and Tongue Anomaly: A Case Report****Zuhal Kirzioglu, Ruya Alpar***Pediatric Dentistry, Suleyman Demirel University, Isparta, Turkey*

Introduction: Regional tooth agenesis is one of the rare anomalies which could be seen with syndromes. This case report aimed to present and discuss the patient with inseparable tongue from the right side of mouth floor, syndactyly of hands and feet, agenesis of primary and permanent teeth in a segment of the mandible.

Case Report: A 13-year-old male patient referred to our clinic for toothache. The patient had not mental health disorder. Also, it was learned that patient had been operated on his hands and feet and tongue. At physical examination, dysfunction and deformities in hands and feet were observed. Face asymmetry, nasal broadening, color/structure disorder of ears and pigmented areas of neck region were present. He stated that there were also another pigmented areas in his body. At intraoral examination, restricted tongue movement was seen at the right side despite the operation. Intraoral and radiographic examination presented that all permanent teeth and primary teeth except primary second molar tooth were congenitally missing in the right side of mandible. All premolars were double rooted, and taurodontism was observed. The radiographies and cast models of the patient were analyzed and removable acrylic prosthesis was made. However, the patient stated that he could not come to dental appointments because of geographical difficulties. Therefore, genetic studies could not be performed.

Conclusion: Although the patient's dental findings are consistent with regional odontodysplasia, it is also thought to be a rare syndrome from other findings.

Keywords: Agenesis, syndactyly, syndrome

PP 02-34**Relationship Between Metabolic Disorder and Dental Anomaly****Sacide Duman¹, Suayip Burak Duman²***¹Department of Pedodontics, Faculty of Dentistry, Inonu University, Malatya, Turkey**²Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Inonu University, Malatya, Turkey*

Introduction: An important part of bone mass is consisted in childhood and specifically adolescent period. Extreme acidic beverage consumption and high phosphate consumption of food by disrupting bone mineralization cause osteopenia especially in girls. Alkaline phosphatase elevation may occur for many reasons, such as metabolic bone disorders, liver diseases.

Case Report: A 14-year-old female was referred to the Inonu University's Faculty of Dentistry Department of Pediatric Dentistry Clinic, Malatya, Turkey for a toothache in 2017. The clinical history was learned that she had eating disorder and growth retardation. Decay teeth and at some teeth sensitivity to percussion and palpation revealed that at clinical examination. When panoramic radiograph was taken for diagnosis, it was detected that root anomalies and short roots at roots of many teeth. When patient was consulted child endocrinology department for evaluate, ALP value found high in the hemogram test and osteopenia was detected in the bone structures. The patient's dental caries were treated and the patient was followed up clinically.

Conclusion: Dental anomalies can accompany to metabolic bone disorders and dentists should be careful in this regard.

Keywords: Dental anomaly, metabolic disorder, teeth

PP 02-35**Prosthetic Rehabilitation of a Patient with Modified Overdenture Approach*****Semih Arkoy, Mutahhar Ulusoy****Near East University, Faculty of Dentistry, Department of Prosthodontics, Nicosia, Turkish Republic of Northern Cyprus*

Introduction: The tooth-supported overdenture is one of the conservative treatment approaches in contemporary dentistry. In this treatment protocol, construction of prosthesis is performed by taking support from the patient's existing natural teeth. Thus, the proprioceptive mechanism of the patient continues to work. Moreover, existing teeth contribute to retention and stabilization of the prosthesis to be produced. The stresses can be transmitted to the alveolar bone through the periodontal ligaments of the existing teeth. As a result, patient gets the satisfaction of having own natural teeth in the mouth.

Case Report: A 67-year-old healthy male patient applied to the Near East University, Faculty of Dentistry, Department of Prosthodontics suffering from multiple tooth decrements. During both radiographic and intraoral evaluation, a significant decrease in the heights of clinical crowns of the existing teeth (#11, #12, #21-23) was seen. No lesions were detected at #26. Root-canal treatment has been applied to all of the anterior teeth. At this point, the core parts of the individual cast posts were designed as ball-headed precision attachments for the abutments between #12 and #22. After the framework of the removable partial prosthesis was produced, the vertical dimension was determined, and the prosthetic procedures were terminated.

Conclusions: In terms of retention and stabilization of the patient, a more successful prosthetic treatment was applied compared to conventional removable partial prosthesis. In addition, a conservative treatment has been performed using the patient's own teeth. In this case, the resorption of the existing bone was avoided.

Keywords: Overdenture, precision attachment, proprioception.

PP 02-36**Conservative Approaches to Erosive Abrasion That Occur after Pregnancy*****Numan Aydın, Serpil Karaoğlanoğlu, Elif Aybala Oktay, Fulya Toksoy Topcu, Funda Demir****University of Health Sciences, Gulhane Faculty of Dentistry, Ankara, Turkey*

Introduction: Dental erosion is a loss of material in the hard tissues of teeth without caries. It is defined as a progressive and non-reversible process. In this case report; restorative treatment is presented of the patient, who has maxillary and mandibular teeth with the enamel loss on the cervical region after pregnancy.

Case Report: 30 year old female patient referred to our clinic for aesthetic problems, sensitivity and the prevention of teeth erosion. The patient has been made a total of 5 times office bleaching with an interval of 2-3 years in her anamnesis and stated that after the pregnancy, her teeth erosion increased. As a result of intraoral examination of the patient, direct composite restoration procedure was decided to be applied on the teeth cervical region erosion. Defected areas on enamel were roughen with fine grained diamond burs 35% orthophosphoric-acid was applied to roughen the teeth surfaces. After rinse and dry, the bond (Singlebond™, 3M ESPE, ABD) was applied and polymerized by LED light. A2 dentin and A2 enamel nanocomposite were used in the restoration of teeth by layering technique (Filtek™ Ultimate, 3M-ESPE). Finishing and polishing were made at last stage (Sof-Lex, 3M-ESPE).

Conclusion: Excessive bleaching, which is a result of aesthetic expectations at a young age, can lead to bad results after pregnancy in female patients. In early treatment of erosion, risk factors should be determined very well and preventive measures should be taken. The application of composite resin material is aesthetically pleasing, conservative and a treatment option that prevents sensitivity problem.

Keywords: Dental aesthetic, dental office bleaching, erosive abrasion

PP 02-37

In The Patients with Type 2 Diabetes Mellitus, Relationship Between Unstimulated Salivary Flow Rate, DMF Index and Glycemic Control***Sevcihan Günen Yılmaz¹, Mevlüde Polat²***¹*Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Akdeniz University, Antalya, Turkey*²*Department of Orthodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey*

Aim: Type 2 Diabetes Mellitus (T2DM) is associated with many oral and dental problems. It is known that the incidence of caries increases in patients with T2DM. The purpose of this study is to evaluate the relationship between caries (DMF) index, unstimulated salivary flow rate and blood sugar regulation in T2DM patients.

Material and Methods: A total of 120 individuals (T2DM (+) 60 patients and T2DM (-) 60 control group) were included in the study. The unstimulated salivary flow rate and patients' caries index (DMFI) were evaluated. Patients with T2DM were assigned to the groups with good glycemic control (HbA1C<7 gr/dL)(30 patients) and poor glycemic control (HbA1C>7 gr/dL)(30 patients). Statistical Analysis was performed using SPSS.

Results: There was no difference between the groups in terms of age and gender distribution. In patients with T2DM, the salivary flow rate was 0.18 ml / min and the control group 0.29 ml / min was statistically significant (P =0.03). The unstimulated salivary flow rate was 0.21 ml / min in patients with good glycemic control and 0.15 ml / min in patients with poor glycemic control. The mean DMF index was 13.4±2.3 in patients with T2DM and 8.2 ± 1.6 in control group (P =0.01). DMF index was 9.1±1.7 in the patient with T2DM good glycemic control and 15.6±4.1 in the poor glycemic control group (P =0.04).

Conclusion: In patients with T2DM, the salivary flow rate is low and the DMF index is high. Good glycemic control can prevent tooth decay and loss.

Keywords: Diabetes mellitus, salivary flow rate, dmfi index, glycemic control

PP 02-38

3-Dimensional Evaluation of The Effects of Palatal Crib Appliance on Facial Structures of A Patient with Anterior Open Bite Malocclusion: A Case Report***Taner Öztürk, Nisa Gül Amuk, Büşra Karadaş****Erciyes University, Faculty of Dentistry, Department of Orthodontics, Kayseri, Turkey*

Introduction: In this case report, it was aimed to show the results of spontaneous improvement on anterior open bite malocclusion after prevention of bad habits such as thumb sucking and tongue thrust with fixed palatal crib appliance by 3-dimensional photographs.

Case Report: A 9 year-old male patient who have anterior open bite and habits as tongue thrust and thumb sucking, referred to clinic for orthodontic treatment. Application of a fixed habit breaker was planned for elimination of thumb sucking and tongue thrust. A palatal crib appliance was produced from 0.9-mm stainless steel wire, adjusted to the molar bands and cemented onto maxillary first molar teeth. Profile and front view photographs of patient were taken with the 3dMD camera just before application of palatal crib (T0) and after the removal of device (T1). Nasolabial angle, mentolabial angle and also length of upper and lower lip, the distances of True vertical line (TVL)-soft tissue B point (SB), TVL-lip superior (Ls), TVL-lip inferior (Li) and TVL-soft tissue pogonion (SPog), were measured. Overjet (T0:5.5 mm) and overbite (T0: -4.5 mm) were evaluated clinically. At the end of 6 months bad habits were eliminated. Overjet and overbite changed to 2.5 mm and 4.5 mm respectively. TVL-SB and TVL-SPog were decreased while TVL-Ls and TVL-Li were increased. Upper and lower lip lengthened 0.8 mm and 1.36 mm respectively and also retracted according to TVL.

Conclusions: Palatal crib appliance is an effective treatment option for eliminating bad habits and treating anterior open bite malocclusion successfully.

Keywords: Palatal crib, thumb sucking, 3d photography

PP 02-39**Prevention of TMJ Disorders****Zenati Latifa¹, Boukais Hamid¹, Bouazza Nora²**¹University of Blida, Blida, Algeria²Public Health, Blida, Algeria

Introduction: The dysfunction of the manducatory appareil is a frequent clinical entity (half of the population would be affected but only 10% of the subjects would consult for pain or joint sounds) and with polymorphic expression which preferentially affects young female subjects at 40 years old. The patient lives very badly and with anxiety this pathology.

Case Report: It is a clinical public health study that treat patients with temporomandibular problems and to prevent them in the future. A different multi disciplinary therapeutics were made (A correct restorative obturations; fixed and removable prosthesis, occlusodontics, orthodontics) prevention starts with common sense advice: do not crack in apples, do not yawn, do not eat big sandwich; do not chew chewing gum.

Conclusion: The prevention and management of joint problems (pain, cracking, slamming) is not so simple since etiology is multifactoriel therefore it was possible to render a big service to patients consulting making their daily lives better.

Keywords: TMJ disorders, prevention, occlusal equilibration

PP 02-40**Consequences of Edentulous Archs****Zenati Latifa, Boukais Hamid**

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Aim: The first teeth extracted are the first molars, unfortunately these are not systematically replaced and the edentulous patient will be victim during all its existence of health problems. It is time to understand the damages and consequences of uncompensated edentulous at the local level: occlusal, periodontal, articular, aesthetic and phonetic as well as at the general level: somatic, digestive, psychological, postural... etc.

Materials and Methods: It's clinical study realized at Frantz Fanon hospital of Blida with collaboration of our colleagues endocrinologists; Cardiologists; Osteopaths; Psychologists in order to restore together the balance of the disturbed human body following their uncompensated edentation.

Result: All our patients, children and adults, had aesthetic, phonetic and, above all, functional problems: dental migrations, occlusal disorder associated with deficient chewing following uncompensated edentation and complicated with disc articular problems, strong resorption of alveolar archs and loss of vertical dimension in total toothless patients without appliances. Their oral health problems affect their psyche but also their general health by gastric and postural and somatic consequences.

Conclusion: The human body is a unique entity and prevention dentistry is fundamental in oral and also to keep a general health.

Keywords: Result of loss of teeth, oral health, general health

PP 02-41

Disc Displacements of TMJ: Diagnostic Approach by Exploring Axiographic Records**Zenati Latifa¹, Mahchouche Hafida², Boukais Hamid¹**¹University of Blida, Blida, Algeria²University of Algiers, Algeria

Introduction: The disc displacements (DD) of the TMJ are frequent disorders and they are the consequence of anatomical and functional alterations between the mandibular condyle and the articular disc. Indeed when a patient presents signs and symptoms of temporomandibular disorders which are of multifactorial etiology and with multiple aspects, the diagnosis and the management of these dysfunctions are far from being easy.

Case Report: It is a clinical study that gathers 12 patients with temporomandibular dysfunction in the hospital of Blida. The clinical examination must be rigorous and follow a logical path and the diagnosis will be facilitated through the exploration of articular dynamics using the axiograph (Quick axis of the firm Fag). The axiographic registrations were compared to MRI radiography as secondary examen, study models were realized and transferred to a semi adaptable articulator type SAM II for a possible occlusal analysis. And thereafter, a splint therapy and prosthetic restorations of the full arches were applied. Notice that the condylar slope of the articulator has been effectively adjusted with real parameters. After three and six months, patients were reviewed in order to evaluate the effectiveness and durability of the therapy adopted.

Conclusion: The axiographic records allow us to positively diagnose the joint problem in the same clinical session with the clinical examination. Its evaluation after a control period confirms our therapeutic attitude towards the clinical case; its use is of great help since the treatment plan differs according to the given diagnosis.

Keywords: Axiography, TMJ disorders, diagnostic, articular disc.

PP 02-42

Instrumentation Time of Primary Root Canal Shaping with Manuel, Rotary and Resiprocal Systems: K File, Protaper, Twisted File, Resiproc, and OneShape**Zeynep Demirez¹, İpek Arslan¹, Sevda Kurt²**¹Pediatric Dentistry, Faculty of Dentistry, Recep Tayyip Erdogan University, Rize, Turkey²Periodontology, Faculty of Dentistry, Recep Tayyip Erdogan University, Rize, Turkey

Aim: The aim of this study was to compare instrumentation time of K file, Protaper, Twisted File, Resiproc and OneShape systems in the preparation of primary molar root canals.

Material and Methods: Seventy-five primary mandibular molar human teeth were randomly divided to five groups (n:15 teeth for each group). The distal canals of teeth were shaped with each of the following instrumentation system: K file (manuel instrumentatin), Protaper, Twisted File, Resiproc and OneShape. Root canal instrumentation time was measured with chronometer. Data were statistically analysed using ANOVA and Tamhane test with a level of significance at $p < 0.05$.

Results: There was statistically significant difference between the groups ($p < 0.05$). Reciproc and OneShape groups had significantly lesser instrumentation time when compared to the other groups ($p < 0.001$). There was no statistically significant difference between Resiproc and OneShape groups ($p = 0.85$).

Conclusion: Reciproc and OneShape systems had lesser instrumentation time. With in the limits of this study, these systems were preferable for primary root canal treatment.

Keywords: Instrumentation time, K file, Protaper, Resiproc, OneShape

PP 02-43**Placement of the Dental Implants to Mandibular Lateral or Canine Regions: A Three Dimensional Finite Element Analysis****Mehmet Sami Guler¹, Efe Can Sivrikaya², Mehmet Melih Omezli², Ferhat Ayranci²**¹Department of Machinery and Metal Technologies, Vocational School of Technical Sciences, Ordu University, Ordu, Turkey²Department of Oral Maxillofacial Surgery, Faculty of Dentistry, Ordu University, Ordu, Turkey

Aim: Implant-retained overdentures is a common technique nowadays. During implant operation, these implants are usually planned in accordance with the dental arc. In addition, the region where the implant is applied affects the force coming from the implant and it is important for the prognosis of the implant. In this study, the implants were placed in the mandibular lateral or canine regions and the stress distributions in the implants evaluated using three-dimensional finite element analysis.

Materials and Methods: Four different variations were modeled to represent differences in implant location (mandibular lateral or canine regions). Two different loading forces were applied on middle line (60 N) and posterior line (100 N). The Von-Mises stresses under vertical load were compared to each implant by finite element analysis (FEA).

Results: At mandibular lateral region, the maximum Von Mises stress was 2.7 MPa and 9.0 MPa, respectively under load 60N and 100N. At mandibular canine region, the maximum Von Mises stress was 2.2 MPa and 7.3 MPa, respectively under load 60 N and 100 N.

Conclusion: Higher stress values were found in the implants placed in the mandibular lateral region than in the mandibular canine region for both loading simulations. This study is helpful in choosing the right placement of implants in the atrophic mandible.

Keywords: Dental implant, 3D finite elements analysis, stress distribution

PP 02-44**Investigation of Physical Properties of Three Different Glass Ionomer Cements: An In Vitro Study****Zeynep Özkalender¹, Gül Keskin¹, Nurhan Öztaş²**¹Pediatric Dentistry, Faculty of Dentistry, Gaziantep University, Gaziantep, Turkey²Pediatric Dentistry, Faculty of Dentistry, Gazi University, Ankara, Turkey

Aim: The aim of this in vitro study is to compare the surface roughness and compressive strength of three different glass ionomer cements.

Materials and Methods: Conventional (Fuji IX GP), zinc reinforced (ChemFil Rock) and glass hybrid reinforced (EQUIA Forte) glass ionomer cements were used in this study. To compare the physical properties of glass ionomer cements, metal cylindrical molds with dimensions of 10 mm x 2 mm were used for surface roughness test, 4 mm x 6 mm were used for the compressive strength test and 10 samples were prepared for each group. Samples immersed in distilled water for 24 hours, then they were measured from five different points on a single line using a roughness device and average surface roughness values were obtained by averaging the obtained values. After 168 hours the surface roughness measurement was repeated. A universal test device was used to measure the compressive strength.

Result: No statistically significant difference was found between glass ionomer cement groups in surface roughness measurements taken after 24 hours and 168 hours. However, there were statistically significant differences between time (24 hours vs. 168 hours) in each group. When the values are evaluated in terms of compressive strength; "Fuji IX GP= EQUIA Forte > ChemFil Rock".

Conclusion: This study showed that surface roughness of glass ionomer cements increase with time and, compression strength of Fuji IX GP and EQUIA Forte are more higher than ChemFil Rock. This study supported by a grant Gaziantep University Research Foundation "Number: DHF.DT.17.03"

Keywords: Roughness, glass ionomer, compressive strength

PP 02-45

Prosthetic Treatment Of Avulsed Anterior Teeth Owing To Trauma**Ayca Kurt¹, Aylin Aslan¹, Esra Baltacıoğlu², Gizem Ömeroğlu²**¹Karadeniz Technical University Faculty of Dentistry
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Introduction: The prognosis of an avulsed tooth and the resulting malocclusion in trauma cases should be assessed clinically and radiographically very well. Prosthetic treatment options are assessed in the situations where avulsed tooth is not available.

Case Report: An 11-year-old boy was admitted to Karadeniz Technical University Faculty of Dentistry Pedodontics Department with the complaints of avulsion and soft tissue injuries in four maxillary anterior teeth owing to the trauma caused by hitting a swing. It was found that there was no avulsion teeth, the systematic disease and the allergic problem in the patient's medical history and the trauma occurred the day before. In the intra oral examination, blood clots in the avulsed teeth sockets, and injuries and edema in the anterior buccal mucosa were detected. Panoramic radiographs showed no pathological findings in the roots of the teeth adjacent to the alveolar bone fracture and trauma. The alveolar plugs were washed with saline and the blood clots were cleaned. The soft tissue dressing was performed to the patient and antibiotics and oral mouthwash were prescribed. Regular dressing sessions showed improvements in the gingiva and buccal mucosa. The aesthetic and phonetic needs of the growing and developing patient were provided with the Classic removable prosthesis made in the maxilla. The patient provided oral hygiene motivation is under follow-up and control.

Conclusion: Removable prostheses that meet the deficit of the avulsed anterior teeth may be useful to provide aesthetic and functional gains until permanent restorative treatment is made.

Keywords: Trauma, avulsed teeth, aesthetic restoration

PP 02-46

Rehabilitation of Complicated Post-Traumatic Crown Fractures of Anterior Teeth with a New Post System**Beyza Karadağ¹, Mehmet Uğur¹, Elif Akkoç², Alaettin Koç³**¹Van Yüzüncü Yıl University, Faculty of Dentistry,
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Introduction: Post-traumatic fracture of the anterior teeth and soft tissue damage are frequently observed incidents in kids and complicated crown fractures are highly probable in patients on period of permanent dentition. Functional, phonetic and aesthetical needs of the patients must be needed in these situations. In order to avoid negative psychological effects and maintain patients healthy growth, endodontic treatment and post core restorations might be necessary by using root canals to support restorations.

Case Reports: In these cases, endodontic treatments for complicated crown fractures in anterior teeth were completed and then post-core restorations were made with newly developed self-made core glass fiber post system. Fiber posts mechanically adapted to the root and coronal regions and the fiber posts bonded with self-adhesive resin cement. The self-made core parts were completed with composite resin filling materials in appropriate color.

Conclusions: Glass fiber post systems have been successfully using by clinicians in complicated crown fractures. Fibersite post system have some advantages for dentists such as having self-made core; forming ferrule effect easily; minimum fracture risk due to elastic modulus close to dentin. For these reasons, Fibersite glass fiber post system can be used complicated crown fracture and function, phonetic, aesthetic and psychological problems of patients can rehabilitate safely.

Keywords: Complicated crown fracture, dental trauma, fibersite post system

PP 02-47**Analyzing Traumatic Dental Injury on Children in Tokat Region**

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Aim: The aim is analyzing prevalence of teeth in primary dentition and permanent dentition affected by dental trauma, affected tissues, prevalence of age, gender and treatment methods, in Tokat region.

Materials and Methods: The research was put into practice on 0-14 years old children applied to Pediatric Dentistry Department of Gaziosmanpaşa Dentistry Faculty, between January 2016 and April 2017. Frequency and percentage values were used on the results.

Results: 181 of 6830 patients applied to our clinic by the reason of dental and peripheral tissues injury (2.6%). Traumatic dental injury frequencies were seen more in boys both in primary dentition (61.9%) and in permanent dentition (64.7%). In order of maxillary central incisor teeth (81.7%), maxillary lateral incisor teeth (9.9%), mandibular central (4.9%) and mandibular lateral teeth (1.6%) were affected mostly in traumatic dental injury both in primary dentition and secondary dentition. While enamel (57%) and enamel-dentin-pulp (43%) were mainly affected tissues in primary dentition, enamel-dentin (31.6%) and enamel-dentin-pulp (48.2%) were affected tissues in permanent dentition. Follow-up or filming is preferred for primary dentition, while composite restoration and endodontic treatments is used for permanent teeth.

Conclusions: As a result, traumatic dental injury is seen more often in pre-school term and school term children. In order to reduce advanced endodontic treatment need, the rate of posttraumatic applications should increase.

Keywords: Dental, dentition, prevalence, trauma

PP 02-48**Surgical Repositioning After Traumatic Intrusive Luxation of Maxillary Permanent Teeth: Three Case Reports**

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Aim: Intrusive luxation is a kind of traumatic injury characterized by an axial displacement of the tooth toward the alveolar bone. Treatment strategies include waiting for the tooth to return to its position, surgical repositioning, and repositioning by orthodontic devices. Report a case of severe traumatic intrusion of a permanent maxillary central incisor of three patients, showing the repositioning surgery performed and the clinical cases.

Case Report: Three patients (two girl, one boy) were referred to the Faculty of Dentistry, Ordu University (Ordu, Turkey) reporting a fall after accidentally. Medical history were taken, noting that patients had no health abnormalities. Clinical and radiographic examination presented that the teeth were to be surgically removed. In all three patients, the teeth were replaced with a forceps. A semi-rigid contention was applied to keep the teeth in its place. After seven days endodontic treatment was started. Endodontic treatments were performed, irrigating the root canal with sodium hypochlorite and a final irrigation with saline solution. After the splints were removed, the root canals were filled. After the fillings were concluded, the teeth were restored with resin. The patients were instructed to return for clinical and radiographic control in six month.

Conclusion: The treatment performed was effective and prognosis is favorable. Regardless of the treatment strategy traumatically intruded teeth should undergo periodical clinical and radiographic surveillance on a long-term basis to allow early detection of possible complications.

Keywords: Dental trauma, intrusive luxation, surgical repositioning

PP 02-49**Delayed Replantation of a Closed Apex Permanent Tooth: A Case Report*****Tamara Pelin Gündoğdu Özdağ¹, Duygu Öztürk²****¹Pediatric Dentistry Department, Faculty of Dentistry, Inonu University, Malatya, Turkey**²Orthodontic Department, Faculty of Dentistry, Dicle University, Diyarbakir, Turkey*

Introduction: Dental avulsion is a type of dental trauma which is very common in children and early intervention is the corner stone of dental trauma resulting permanent tooth avulsion.

Case Report: 8 years old (f) patient consulted to the Inonu University Faculty of Dentistry-Department of Pediatric Dentistry with avulsed permanent tooth (#21) and buccal tissue laceration story due to bike accident after 12 hours. The parents had been educated about dental trauma by another dentist. Parents asserted that, they could have catch up with a city dental hospital in 30 minutes, however the dentist have refused to replant the tooth, and after the parents' insistence, the dentist accepted to treat the patient after 2 hours and bonded the tooth to adjacents with composite. After local anesthesia and isolation, the tooth was splinted to adjacent teeth with flexible splint. Amoxycilin antibiotic and chlorhexidin mouthwash were administered and referred to a physician for tetanus booster, the importance of soft brushing and soft food eating were told, root canal treatment was performed after 5 days. At the end of 4 weeks, the splint was removed. After six months of radiographic control the lamina dura was healthy, there was not periapical lesion.

Conclusion: The lack of knowledge about dental trauma of dentists makes it difficult to administer appropriate treatment to the patients. The dentists should be educated intensely about dental trauma treatments.

Keywords: Dental trauma, dental avulsion, delayed replantation, dentist education about trauma

PP 02-50**Eruption and Restoration of an Impacted Traumatic Tooth Affected By Hypoplasia; A Case Report*****Eda Büyüknalbant, Salih Doğan, Mustafa Aydınbelge****Department of Pediatric Dentistry, Faculty of Dentistry, Erciyes University, Kayseri, Turkey*

Introduction: Intrusion and avulsion due to trauma in primary dentition, result in defects and eruption disorders on permanent teeth. This study explains (a) the spontaneous eruption led by surgical incision of impacted traumatic tooth (# 22) affected by hypoplasia and (b) oral rehabilitation of a patient whose horizontally impacted tooth(# 21) and odontoma next to it, extracted after orthodontical consolidation.

Case Report: An-eight year old- girl patient applied to Erciyes University faculty of dentistry department of pediatric dentistry. At clinical and radiological examination it is diagnosed that tooth number #21 and #22 were impacted and tooth number #11 and #12 were affected by hypoplasia. At clinical history her parents told that anterior maxila was hit by swinging chair when she was one year old. This trauma caused avulsion at tooth number #51 and #61. The extraction of tooth number #21 was decided due to impacted horizontally and could not be re-erupted according to panaromic radiography and dental tomography. First of all In order to provide spontaneous eruption of impacted tooth number #22 affected by hypoplasia, we perform an incision on crest and eruption was observed. Then, tooth number #21 and odontoma were extracted.

Conclusion: Approximately one year later, following the eruption of tooth number #22, direct composite restoration was performed and the treatment was completed. The patient is waiting for orthodontic treatment at department of orthodontics in dentistry faculty.

Keywords: Dental trauma, hypoplasia, impacted tooth

PP 02-51

Multidisciplinary Approach to Treatment of Traumatic Complicated Crown Fracture: 6-Month Follow-Up**Elif Akko¹, Mehmet Şerif Akdeniz², Esin Özlek¹**¹Department of Endodontics, School of Dental Medicine, University of Yüzüncü Yıl, Van, Turkey²Department of Prosthodontics, School of Dental Medicine, University of Yüzüncü Yıl, Van, Turkey

Introduction: Traumatic dental injuries are more frequent in children, although they occur in all stages of life. Traumatize permanent teeth cause both functional and aesthetic problems in young individuals. In young patients, minimal invasive treatment approach are the most suitable options.

Case Report: A 14-year-old male patient presented with a complicated crown fracture of maxillary central incisors and crown fracture of maxillary lateral incisor as a result of trauma applied to Yüzüncü Yıl University Faculty of Dentistry. Clinical examination revealed that both of the maxillary central incisors (#11 and #21) had complicated crown fracture with opened pulp and left lateral incisor (#22) had crown fracture. First, the aesthetic restoration of the left lateral incisor was finished and then the root canal treatment of the maxillary central incisors were begun. Calcium hydroxide paste was applied for one week as an intracanal medication. Root filling of clinically maxillary central incisors was performed and coronal restoration was finished with the fiberpost + composite. A digital impression was taken using CEREC BlueCam for a porcelain crown. Clinical and radiological examinations performed 6 month later showed that the tooth was asymptomatic.

Conclusion: Complicated crown fractures are frequently encountered type of dental trauma. With the ideal restorative treatment, the remaining dental tissues must be preserved, aesthetic and functional expectations should be met.

Keywords: CAD/CAM, dental trauma, fiber-post

PP 02-52

Restorations of Enamel-Dentin Fractures: A Case Report**Emine Tatar, Ezgi Eroğlu, İsmet Rezani Toptancı**

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Introduction: Trauma to the orofacial region can lead to fracture of the maxillary anterior teeth. Early treatment of these teeth is important for pulp viability. In enamel-dentin fractures, immediate treatment of the tooth after trauma allows to close dentinal tubules and protect the pulp viability.

Case Report: A 10-year-old girl was referred to the Paediatric Dentistry Clinic, Dicle University with trauma. At examination, enamel-dentin fracture was detected at right maxillary central incisor, left maxillary central and lateral incisor and three of the teeth had increased mobility, tendered to touch also had gingival bleeding. Radiographic abnormalities did not found. A flexible splint applied to stabilize the teeth for 2 weeks and three of them were covered with glass ionomer cement. After 2 weeks, clinical and radiographic examinations were performed to patient. There were periapical lesions at right and left maxillary centrals at radiographic examination. Endodontic treatment was started in both central teeth. The flexible splint was removed. After the calcium therapy, endodontic treatment was completed in both maxillary central incisors. All the teeth with crown fractures were restored with composite. The controls of the patient continue with reference to the guideline published by the Dental Traumatology Association in 2012.

Conclusion: Luxation injuries and crown fracture can lead to pulpal necrosis. Even if dentinal tubules obturation is done for crown fracture, pulpal necrosis may occur cause of luxation. The success of the trauma management depends on correct clinical and radiographic examinations, treatment planning and follow up.

Keywords: Crown fracture, dental trauma, endodontic treatment, luxation injuries, pulpal necrosis

PP 02-53**Treatment of Dental Trauma to Anterior Teeth**

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Introduction: Orofacial traumas generally cause dental injuries. Especially the anterior regions of jaws are affected by traumas. The injuries are more frequent in the maxillary jaw than the mandibular jaw. This paper reports management of luxation injuries to maxillary central incisors and uncomplicated and complicated crown fractures to mandibular central and lateral incisors.

Case Report: A nine-year-old boy was referred to the Paediatric Dentistry Clinic, Dicle University with trauma after three days. Luxation injuries was detected at maxillary right and left central incisors, uncomplicated crown fracture in mandibular left central incisor and maxillary left central incisor, complicated crown fracture in mandibular left lateral incisor, at clinical examination. No abnormalities found at radiographic vision. A flexible splint was applied to stabilize the maxillary incisors for two weeks. Maxillary left central incisor and mandibular left central incisor were covered with glass ionomer liner. Root canal treatment protocols were started for mandibular left lateral incisor. Fifteen days later, the flexible splint was removed; maxillary left central incisor and mandibular left central incisor were treated with aesthetic composite resins. Endodontic treatment was completed in mandibular left lateral incisor and aesthetic composite resin was used for restoration. The controls of the patient continue with reference to the guideline published by the Dental Traumatology Association in 2012.

Conclusions: Crown fractures and luxations are the most commonly occurring of all dental injuries. The clinical and radiographic examinations, treatment planning and follow up are important for the favourable outcome.

Keywords: Complicated crown fracture, dental trauma, luxation, uncomplicated crown fracture

PP 02-54**Revascularization of Immature Permanent Teeth: 2 Case Reports**

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 Tuğba Bezzin***

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Introduction: Revascularization of the dentin-pulp complex for necrotic immature teeth is a new approach that involves disinfecting the root canal system followed by tissue repair and regeneration while allowing for continued root development and thickening of the lateral dentinal walls through deposition of new hard tissue.

Case Report: Two 12-year-old patients were referred to the Department of Pediatric Dentistry for dental examination. There was no significant medical history. By questioning their dental history, it was learned that they had injured their anterior teeth approximately three years ago. Intraoral examination revealed an enamel fracture and luxation in the maxillary right lateral tooth (#12) in one of the patients. The other patient had uncomplicated crown fracture and mobility in the maxillary left lateral tooth (#22). Both teeth were tender to percussion. Radiographic examination of the teeth revealed an immature tooth root and open apex, also periapical radiolucency and one of the teeth had internal resorption. In both cases, revascularization treatment were performed. There were no pathology detected in clinical and radiographic examinations at 6-month and 12-month post-operatively. Follow-up examinations are continuing.

Conclusion: Revascularization offers clinicians great potential to avoid the need for traditional apexification with calcium hydroxide or the need to achieve an artificial apical barrier with mineral trioxide aggregate. Furthermore this treatment approach can help rescue infected immature teeth by physiologically strengthening the root walls.

Keywords: Open apex, revascularization, trauma

PP 02-55

Rehabilitation of Anterior Missing Teeth with a Fibre-Reinforced Adhesive Bridge in Paediatric Patients: A Case Series**Ayşe Günay¹, Sema Çelenk¹, Abdullah Emre Karaal², Buket Ayna¹, Ezgi Eroğlu¹**¹Department of Pediatric Dentistry, Dentistry Faculty, Dicle University, Diyarbakir, Turkey
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Introduction: In the early period, tooth loss may occur for congenital reasons, trauma and decay. Different treatment alternatives for aesthetic rehabilitation of tooth loss include removable partial prosthesis, fixed prosthesis, dental implant and partial prosthesis fixed with resin (Maryland bridge). As fibre-reinforced composites (FRC) are materials which do not include any metal, its mechanical and aesthetic properties are extremely good. Our aim in this study is to rehabilitate with FRC tooth loss in the paediatric patients who are still developing and growing.

Case Reports: In this 5 case series of paediatric patients, it was provided to aesthetic and functional rehabilitation of anterior tooth loss with a fibre-reinforced adhesive bridge applied with a minimally invasive technique which did not require any extra sessions. And it was presented a 1-year-follow up.

Conclusion: Fibre-reinforced adhesive bridge can be considered an inexpensive, conservative, aesthetic treatment alternative which can be applied in a single session for single or multiple missing teeth in the anterior region of young patients who have not yet completed skeletal and dentoalveolar growth and development.

Keywords: Fibre-reinforced composites, missing teeth, Maryland bridge

PP 02-56

Management of a Complicated Crown-Root Fracture with Surgical Extrusion: A Case Report**Fiğen Eren Giray¹, Müesser Ahu Durhan¹, Hakan Karagözoğlu², Beril Muratoğlu¹, Başak Durmuş¹**¹Marmara University, School of Dentistry, Department of Pediatric Dentistry, Istanbul, Turkey²Marmara University, School of Dentistry, Department of Oral and Maxillofacial Surgery, Istanbul, Turkey

Introduction: Dental trauma is more common in young patients and its sequelae may impair the establishment and accomplishment of an adequate treatment plan. According to the severity of the trauma, a large spectrum of complications may occur. If the isolated tooth fracture occurs particularly at anterior region, the rehabilitation should satisfy esthetic, functional and biological problems, as well as the patient's desire.

Case Report: This case, reports a multidisciplinary approach to management of a complicated crown-root fracture on maxillary right central incisor in a 10-year-old boy. Considering the fracture extension, the amount of remaining root portion and the patient's low socioeconomic status it was decided to remove the fractured fragment of the tooth and to extrude the remaining root portion. Under local anesthesia the residual tooth was gently luxated to mini-mizing damage to the marginal alveolar bone and root surface and extruded to the desired position. The alveolar socket was closed using sutures and the residual tooth was semi-rigid splinted for two weeks. After endodontic therapy the tooth was restored with composite restoration.

Conclusions: Clinical and radiographic results after 12 months were successful. This case report demonstrates the importance of establishing a multidisciplinary approach for a successful dental trauma management.

Keywords: Dental trauma, surgical extrusion, complicated crown-root fracture

PP 02-57**Direct Restoration of Post-Traumatic Fractured Central Incisor Using Silicone Guidance Technique: A Case Report*****Hazal Özcan, Figen Seymen****Department of Pediatric Dentistry, Faculty of Dentistry, Istanbul University, Istanbul, Turkey*

Introduction: Various restoration techniques are used such as transparent matrix strips, strip crowns, and free modeling methods for the restoration of anterior teeth fractures with composite materials. Silicone guidance technique is defined as restoration of the tooth shape better, especially the palatal contour, during free modeling. The purpose of this case report is present the restoration of the fractured central incisor tooth with silicone guidance technique using a composite material.

Case Report: A 10-year-old male patient with no health problems referred to the Department of Pedodontics Faculty of Dentistry of Istanbul University due to trauma. The tooth has uncomplicated crown fracture. There is no pulpal involvement, roots and surrounding tissues were sound, and the lamina dura was solid radiographically. According to vitality tests tooth was vital. Anterior composite restoration was planned for the fractured tooth. A model was created to allow the fractured tooth to be reconstructed by a wax up. After that, another mold with a heavy silicone base was constructed to reproduce the shape and contours of the restorations. The composite material was applied to the tooth after preparation. Finishing, polishing and adjustments were performed with multilaminated drills, abrasive straps and polishing paper disks. The patient recalled at the 1st, 3rd and 6th month after the treatment for clinical and radiographical examinations and there is no discoloration, postoperative sensitivity or marginal staining.

Conclusion: Silicone guidance technique is helpful for good aesthetic result. The natural appearance, color harmony, lingual, proximal and incisal contours and tooth form can be created with silicone guidance technique easily and quickly.

Keywords: Trauma, silicon guidance technique, wax-up

PP 02-58**Management of Extrusive Luxation with Uncomplicated Crown Fracture on Permanent Central Incisors: A Case Report*****Nagehan Yılmaz, Ozgul Baygın, Tamer Tüzüner****Department of Pediatric Dentistry, Faculty of Dentistry, Karadeniz Technical University, Trabzon, Turkey*

Introduction: Dental injuries whose etiological factors have been reported as falls, collisions, sports accidents, traffic accidents are common health problems in child and adolescent populations. Luxations injuries are common and serious. Among other types of traumatic injuries in permanent dentition, uncomplicated crown (without pulpal involvement) fractures have been reported to be the most common injury.

Case Report: Two and a half years ago, a 9-year-old girl patient was referred to Karadeniz Technical University, Department of Pediatric Dentistry clinic, three days later from a bicycle accident. The patient who had gone to another clinic before, her teeth #11 and #21 was splinted used with composite in there. Extrusive luxation and uncomplicated crown fracture of the tooth #11 and extrusive luxation of the tooth # 21 were detected after was removed the composite splint with the examination and the anamnesis taken, flexible splints were made between 53 and 64 teeth. After 15 days, the splint was removed and one week later the tooth #11 which was mature and had vertical percussion started to root canal treatment. The tooth #21 was followed because the tooth was open apex and there were no symptoms. The follow-up of the case is being continued after canal filling for 6 months periods. The treatment is successful and tooth #21 is vital. The patient was directed to the department of orthodontics due to prognostic anterior teeth.

Conclusion: Dental injuries can result in damage to both dental and periradicular structures. Early intervention is very important on prognosis of traumatic injuries.

Keywords: Extrusive Luxation, Permanent Incisors, Traumatic injuries

PP 02-59

Reimplantation of Avulsed Mature Permanent Teeth: A Case Report***Necibe Damla Şahin, Nur Burcu Ulusoy, Volkan Arıkan****Pediatric Dentistry Department, Kırıkkale University, Kırıkkale, Turkey*

Introduction: Avulsion is a traumatic injury, which results in loss of the tooth from the alveolus, while reimplantation is the technique of reinserting an avulsed tooth into the alveolus or tooth socket after its loss. The success of reimplantation depends on many factors among which are the time lapse before the tooth is reimplanted in the socket, the storage medium of the avulsed tooth and stage of root formation.

Case Report: A 10 year-old-girl was referred to our clinic due to avulsed maxillary right central incisor (11) and lateral incisor (12) one day following the traumatic injury. Tooth #11 was reimplanted and splinted with composite resin by a dentist immediately following the injury and #12 was found approximately 24 hours later by the parents of the patient. In our clinic, root canal treatment was performed to 12 extraorally, it was reimplanted and a semi-rigid splint was applied to both teeth. After one week, initial root canal treatment of 11 was performed. In the four weeks follow-up, splint was removed however tooth #12 had severe mobility. Further treatment plan was determined based on orthodontic needs of the patient and tooth #12 was extracted. The tooth #11 was followed up for 24 months and no clinical or radiographic pathologies were detected.

Conclusion: The time for reimplantation is critical for the success of avulsion treatments. Also, long-term clinical and radiographic follow-up of patients should be performed.

Keywords: Avulsion, reimplantation, traumatic injury

PP 02-60

Management of Internal Root Resorption in Maxillary Lateral Incisor: A Case Report***Nilay Ayaz, Kezban Meltem Çolak****Ataturk University Faculty of Dentistry Department of Endodontics, Erzurum, Turkey*

Introduction: Internal root resorption is progressive destruction of dental tissues centrally within the root canal. If this clastic activation untreated, it might result loss of the affected teeth. The aim of this case report is to present management of internal root resorption in a maxillary lateral incisor with endodontic procedure and its outcome.

Case Report: A 15-year-old male patient was referred to our clinic. After the medical histories reviewed, clinical and radiographic examination were performed. The patient reported that he got trauma to his maxillary incisors a few years ago. A periapical lesion and in middle third of the root an internal resorption detected in left maxillary lateral tooth. To confirm the indication different angulation of x-rays were taken. After the access cavity prepared the working length was identified and the root canal was instrumented with Resiproc Rotary System up to R40 under irrigation with 1.25% NaOCl. Calcium hydroxide paste was applied and the access cavity was temporarily restored. 2 weeks later, after final irrigation with 5% citric acid under sonic activation, apical third of the root canal was obturated with cold lateral compaction. Resorption defect and coronal third of the root canal were obturated with thermo plasticized injectable gutta-percha technique.

Conclusions: Sufficient filling was provided in radiographic evaluation and the patient had no symptoms after 1 year follow-up. Thermo plasticized injectable gutta-percha technique can be a suitable alternative for endodontic treatment of these cases.

Keywords: Internal resorption, calcium hydroxide, thermoplasticized gutta-percha

PP 02-61**Management of Mandibular First Molar with Radix Entomolaris and External Root Resorption*****Nilüfer Sümevra Yalçınkaya¹, Hakan Arslan², Ertuğrul Karataş²***¹*Department of Pedodontics, Dental Faculty, Ataturk University, Erzurum, Turkey*²*Department of Endodontics, Dental Faculty, Ataturk University, Erzurum, Turkey*

Introduction: This case report is about the radiographic identification and endodontic management of radix entomolaris and apical external resorption in a mandibular right first molar.

Case Report: In the case of a 11-year-old male patient admitted to our clinic with complaints of severe pain in mandibular first molar tooth which underwent endodontic treatment three years ago. Radix entomolaris and periradicular lesion with external apical resorption were detected on radiographic examination. In the intraoral examination; percussion and palpation were present, mobility and fistula were not observed. Root canals were prepared under rubberdam isolation and filled with MTA.

Conclusion: To make the root canal treatment more successful, clinicians should be aware of variations of the root canal system.

Keywords: Endodontics, radix entomolaris, root resorption

PP 02-62**Restoration of Upper Anterior Teeth Fractured Due to Trauma: A Case Report*****Numan Aydın, Serpil Karaoğlanoğlu, Elif Aybala Oktay, Fulya Toksoy Topcu, Funda Demir****University of Health Sciences, Gulhane Faculty of Dentistry Ankara, Turkey*

Introduction: Traumatic injuries often cause crown fractures in the upper front group of teeth. Individuals may also have aesthetic problems as well as functional disorders. In this case report, the treatment of a female patient, whose upper central was fractured due to trauma, with glass fiber post and direct composite treatment is described.

Case Repors: In the intraoral and radiographic examination of a 16-year-old female patient, who referred to our clinic, it was seen that the crown fracture of the upper central tooth was treated with metal post after the channel treatment. The metal post placed in the upper central tooth's channel was removed and the inside of the tooth channel reshaped with appropriate post burs.35% orthophosphoric acid was applied to roughen the tooth surfaces after the necessary isolation was achieved in the mouth. After rinse and dry, glass fiber post (D.T. Light-Post Illusion XRO, Bisco) was bonded with self-adhesive cement (G-cem LinkAce) and polymerized by LED light. In the restoration of the teeth, A2 dentin and enamel (Filtek™ Ultimate Universal, 3M-ESPE) nanocomposite was used with the layering technique, after the bond (Singlebond™ Universal, 3M ESPE) was applied and polymerized. Finishing and polishing were made in the last stage (Sof-Lex, 3M-ESPE).

Conclusion: In the cases of broken anterior teeth, glass fiber post and direct composite restorations may be preferred which are more compatible with tooth color and dental tissues compared with metal posts. Patient satisfaction can be ensured both in terms of aesthetics and functionality.

Keywords: Anterior teeth fractured, dental trauma, glass fiber post.

PP 02-63**Treatment of Tongue Lesions in Pediatric Patients Receiving Intensive Care*****Ozan Barış Aydın, Fatih Şengül****Ataturk University, Faculty of Dentistry, Department of Pediatric Dentistry, Erzurum, Turkey*

Introduction: Patients receiving treatment under intensive care units are under life threatening danger which could last for months as the treatment extends. During this period, in association with medical conditions of these patients, oral lesions can develop either as a primary lesion or a traumatic lesion secondary to endotracheal intubations. In this case study, we present the management of a traumatic tongue ulceration of a patient who was under intensive care.

Case Report: A patient who was receiving treatment under intensive care after a traffic accident was consulted to pediatric dentistry about the lesions on his tongue. The patient suffered from fractures in his legs and neck. Because of an edema on the pons area his spontaneous ventilation had stopped, he was endotracheally intubated. The tongue has become traumatized as it was stuck between the patient's teeth constantly during the rest position. Trials for providing oral hygiene and preventing teeth from impinging on the tongue using sponges were insufficient. Impression was taken with alginate and transparent essix plate was constructed from the obtained cast model. Occlusion was increased 2mm by applying acrylics on the occlusal surface extending from the canine tooth posteriorly. On the 3rd day healing was observed and on the 14th day complete recovery was achieved. Patient condition was followed up to 1 month.

Conclusions: As shown in our case, the oral rehabilitation of patients receiving inpatient treatment with the presence of primary or secondary oral lesions due to trauma can be managed easily by appropriate cooperation between physicians and dentists.

Keywords: Intensive care, tongue trauma, essix plate, tongue ulceration

PP 02-64**Clinical Management of a Crown Fracture: A Case Report*****Özgecan Bakış Çaynak, Cansu Akay, Sermin Dicle Aksakal, Fatma Zeynep Aytepe****Istanbul University Faculty of Dentistry, Department of Pediatric Dentistry, Istanbul, Turkey*

Introduction: Traumatic injuries to teeth usually occur in children and damage may vary from enamel fracture to avulsion, with or without pulpal involvement or bone fracture. The most commonly involved tooth is the maxillary central incisor and in all dental injuries the incidence of complicated crown fractures ranges from 2% to 13%. Different treatment types are available depending on the clinical, physiological and radiographic status of the involved tooth. The aim of this presentations was to observe the management of the complicated crown fractures.

Case Report: A 10-year-old male patient presented to Istanbul University, Faculty of Dentistry, Department of Pediatric Dentistry. First of all the general medical, dental and traumatic incident histories were reviewed and then clinical and radiographic examinations were conducted. Clinical examination showed a fracture and decay of the crown of the maxillary left central incisor, exposing the necrotic pulp. Periapical radiography revealed an intact periodontal ligament and no root fractures. It was planned to orthodontically extrude the remaining root structure to restore the physiological periodontal attachment. Following canal preparation an apical barrier of MTA was placed. After the root canal treatment root was extruded orthodontically. The fracture tooth was then restored with a post and strip crown.

Conclusions: Especially in children, anterior tooth trauma frequently found in permanent teeth, can cause psychological distress, There are different treatment guidelines and options available for management of complicated crown fractures. During the treatment planning process, the risks and benefits of each treatment option should be carefully analyzed.

Keywords: Dental trauma, crown fractures, orthodontic extrusion

PP 02-65**Treatment Approach in Traumatic Dental Injury: A Case Report with 1-Year Follow-Up*****Seren Kaya, Firdevs Tulga Öz****Pediatric Dentistry, Faculty of Dentistry, Ankara University, Ankara, Turkey*

Introduction: Tooth and supporting tissue injuries are a common type of traumatic injuries in the populations. Maxillary anterior teeth are the most frequently affected teeth suffered from dental trauma. The most common type of injury in the permanent dentition is the noncomplicated crown fracture that occurs in the maxillary incisor teeth. Usually dental trauma injuries need long term and regular checks that will continue to adulthood from childhood.

Case Report: A 10-year-old male patient with no systemic disease, suffered from dental traumatic injury, was referred to our clinic half an hour after the accident. In clinical examination; soft tissue laceration and 0.5 mm pulp exposition to tooth #11; dental extrusion and lateral luxation to tooth #21; percussion sensitivity to teeth #11 and #21 were detected. Tooth #21 were reimplanted into the socket with finger pressure and semi-rigid splint was applied. Cvek pulpotomi was performed by using MTA on tooth #11. After 2 weeks, splint was removed and the strip crown was applied to the tooth #11. Tooth #21 was found devitalized at the 3rd month of control, and revascularization treatment applied. Patient called for 2nd week; 1st, 3rd, 6th and 12th month for follow-up.

Conclusion: Most of supporting tissue and dental traumatic injuries require emergency treatment. For maximazing the chance of succesful outcomes, trauma cases should checked regularly with appropriate diagnosis and treatment.

Keywords: Trauma, anterior teeth, luxation, Cvek

PP 02-66**Replantation of 3 Avulsed Permanent Teeth*****Simin Kocaaydın, Yelda Kasımoğlu, Koray Gençay****Istanbul University, Faculty of Dentistry, Department of Pediatric Dentistry, Istanbul, Turkey*

Introduction: Avulsion is described as complete displacement of a tooth from the socket and is considered as one of the most severe dental injuries. The ultimate goal in treating an avulsed tooth is to preserve and treat supporting tooth tissues and to replant the avulsed teeth. Extra-oral time period has the most critical effect on the prognosis.

Case Report: An 14-year-old male patient was directed to Istanbul University Faculty of Dentistry Clinics of Pedodontics by a dental clinician after a maxillary trauma. His dental history revealed avulsion injury of his maxillary left central and lateral incisors and canine. The avulsed teeth was replantated in previous clinic after 30 minutes dry-time and fixed with a rigid composite splint. Composite splint was replaced with a flexible splint and root canal treatment was performed on the following week of the trauma. Flexible splint was removed on the second week after stabilizing the mobile teeth. Clinical and radiographic examination was performed on the 4th week, 3rd month, 6th month and 1st year after the initial trauma. At 1 year follow-up, displaced teeth presented no signs of pathology or ankylosis clinically and radiographically.

Conclusion: Avulsion injuries may lead to unfavourable outcomes and premature loss of the tooth, which may negatively impact quality of life. Long-term prognosis of the avulsed tooth can be maintained with a proper treatment and expedient management.

Keywords: Avulsion, dental trauma, replantation

PP 02-67

Relationship Between Xerostomia Frequency and Unstimulated Salivary Flow Rate with Interdialytic Weight Gain in Hemodialysis Patients***Sevcihan Günen Yılmaz¹, Fatih Yılmaz²****¹Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Akdeniz University, Antalya, Turkey**²Atatürk State Hospital, Polyclinic of Nephrology, Zonguldak, Turkey*

Aim: The aim of this study was to determine the frequency of xerostomia and unstimulated salivary flow rate and to assess the relationship with inter dialytic weight gain (IDWG) in hemodialysis patients.

Materials and Methods: This study included 40 patients who received hemodialysis (HD) therapy for 3 hours a week for 4 hours with the cause of End-stage Renal Failure. Patients were divided into two groups according to their interdialytic weight gain (duration between two dialysis sessions), more than 3% dry weight and less weight. There were 20 patients in both groups. Unstimulated salivary flow rate and xerostomia were evaluated prior to the mid-week dialysis sessions. All statistical analyzes were performed using the statistical software SPSS 22.0.

Results: A total of 26 patients (65%) had xerostomia. There was no difference between the two groups in terms of age, gender, duration of dialysis and frequency of diabetes. There was no significant difference in the incidence of xerostomia between the groups (P = 0.15). The unstimulated salivary rates were 0.12 ± 0.05 mL / min in the IDWG group and 0.09 ± 0.06 mL / min in the low IDWG group and it was statistically significant (P = 0.04).

Conclusion: Xerostomia is frequently observed in HD patients and etiology is multifactorial. It is often associated with over hydration and increased IDWG in patients. This is accompanied by increased hypotension and other complications during the dialysis session. Treatment of xerostomia by determining the etiology of the xerostomia can prevent excessive IDWG.

Keywords: Xerostomia, unstimulated salivary flow rate, inter dialytic weight gain

PP 02-68

Delayed Replantation and Endodontic Treatment of Avulsed Teeth: 18-month follow up***Bilal Özmen, Yasemin Nayir****Pediatric Dentistry Department, Faculty of Dentistry, Ondokuz Mayıs University, Samsun, Turkey*

Introduction: Avulsion is one of the most common traumatic injuries in which the tooth is completely displaced out of its socket. Replantation is the treatment in which the tooth is replaced in its socket. This case report describes delayed replantation of 2 avulsed permanent teeth (22,23).

Case Report: 10 years old boy fell down at the school and avulsed his maxillary left lateral and canin teeth. The time he came to clinic, 20 hours after the accident. Teeth was kept under dry conditions. Necrotic pulp was extracted and Mineral Trioxide Aggregate was used to create apical barrier(23). The root canal treatments were performed extraorally. Replantation of avulsed teeth and replanted teeth were splinted with semi-rigid splint. Patient was followed up periodically. Canin tooth showed no evidence of resorption and survived until 18 months but The recall radiograph of lateral incisor tooth showed evidence of apical root resorption.

Conclusion: Although complications like ankylosis or root resorption may be unavoidable, delayed replantation of avulsed tooth may be a good alternative to prosthesis till the growth is completed due to preservation of the alveolar bone and psychological benefit to the patient.

Keywords: Avulsion, delayed replantation, dental trauma, replacement resorption

PP 02-69**Management of Complicated Crown-Root Fracture: A Case Report*****Pinar Serdar Eymirli, Munevver Sener, H. Gencay Keceli, Melek D. Turgut, Meryem Tekcicek****Department of Pediatric Dentistry, Faculty of Dentistry, Hacettepe University, Ankara, TURKEY*

Introduction: Crown-root fractures involving enamel, dentin and cement comprise approximately 2% of all traumatic dental injuries. Management of crown-root fractures requires an interdisciplinary approach along with a comprehensive treatment plan. Treatment options depend on the level of the fracture line, pulpal conditions and whether there is a tooth fragment compatible with the remaining tooth structure. In this case report, the management of a complicated crown-root fracture of maxillary central incisor tooth was presented.

Case Report: A 7-year-old girl was referred to the pediatric dentistry clinic. There was complicated crown-root fracture on her maxillary permanent left central incisor due to the scooter accident occurred 10 days before referral. After a thorough clinical and radiological examination, the coronal fragment was extracted under local anesthesia. Cvek amputation with calcium hydroxide was performed and a flap was raised for better vision of the fracture line. The coronal fragment was reattached with composite resin and the flap was sutured. The sutures were removed after 2 weeks. Neither clinical nor radiographical pathology was observed during 30 months.

Conclusion: Long-term clinical and radiographic follow-up in crown-root fractures is important for the proper successful treatment procedure. Fragment reattachment can be considered as an appropriate treatment option.

Keywords: Crown-Root fracture, Cvek amputation

PP 02-70**Intrusive Luxation of Primary Incisors: Report of Two Cases*****Tulin Ileri Keceli, Munevver Sener, Pinar Serdar Eymirli, Melek D. Turgut****Department of Pediatric Dentistry, Faculty of Dentistry, Hacettepe University, Ankara, TURKEY*

Introduction: Intrusive luxation is frequent in the primary dentition. Complications such as pulp necrosis, external root resorption, ankylosis and loss of marginal bone support frequently occur after intrusion injury.

Case Reports: In the first case, a 5-year-old boy was referred to the Pediatric Dentistry Department because of the traumatic injury occurred 8 days before referral. Clinical and radiographical examinations revealed intrusive luxation of the maxillary primary left incisors. It was decided to wait for spontaneous reeruption of the teeth and the patient was scheduled for regular appointments. Signs of spontaneous reeruption occurred after 3 weeks. The patient was followed up for three years.

In the second case, a 4-year-old boy was referred to the Pediatric Dentistry Department because of the traumatic injury occurred 5 days before referral. There was an intrusive luxation of the maxillary primary right incisors. The patient was scheduled for regular appointments for observing the spontaneous reeruption of the teeth. At two years follow-up, the teeth had completely erupted and they were in function without any pathology.

Conclusion: Spontaneous reeruption has been an accepted treatment for the intruded primary teeth. Long-term clinical and radiographical follow-up is necessary in order to monitor possible clinical and radiographical pathologies.

Keywords: Intrusive luxation, primary incisor

PP 02-71**Management of the Radicular Cyst Due to Dental Trauma on a Child: A Case Report*****Tamara Pelin Gündoğdu Özdağ¹, Canan Gökçe Kulfe²****¹Pediatric Dentistry Department, Faculty of Dentistry, Inonu University, Malatya, Turkey**²Oral Surgery Department, Faculty of Dentistry, Inonu University, Malatya, Turkey*

Introduction: Cystic lesions might be seen due to dental trauma and diagnosis is the key point for the treatment procedure.

Case Report: 10 years old child (m), was consulted to Inonu University, Faculty of Dentistry Pediatric Dentistry Department with swelling on his maxillary anterior region because of the maxillary right first incisor (#11). It was learned that he had a dental trauma at his 7 years of age, and apexification treatment with calcium hydroxide was initiated after 1 year but they could not follow the appointments. So the lesion could not be healed. Because of the uninterrupted pus drainage and resistance of antibiotic, surgical treatment was decided. After detailed radiological diagnosis, extraction of cystic lesion and apical plug with MTA for the tooth #11, root canal treatment for #12 and #22 were administered, and permanent maxillary right canine was extracted in order to clean all the cystic lesion. Pathological evaluation showed that radicular cyst had effected the other regions of maxilla. After 1 year radiological and clinical follow-up, maxillary bone was healing, negative respond to percussion and palpation were seen on #12, #11 and #21 numbered teeth.

Conclusions: In dental traumatic injuries, when the apexification is made with calcium hydroxide, the cooperation with the patient and the parents is an important detail because of the importance of renewing the material inside the canals. Also determination of surgical treatment of apical lesion has to be made opportunely.

Keywords: Dental trauma, apical resection, radicular cyst.

PP 02-72**Treatment of a Missing Permanent Anterior Tooth with Fiber-reinforced Composite Resin Bridge: A Case Report*****Yasemin Sarı, Tamer Tüzüner, Özgül Baygın****Department of Pediatric Dentistry, Faculty of Dentistry, Karadeniz Technical University, Trabzon, Turkey*

Introduction: Fiber-reinforced composite (FRC) bridge can offer a good alternative to conventional treatment options in the absence of a single tooth until a more definitive prosthesis can be provided at the end of the growth period.

Case Report: 13 year old female child patient admitted to our department by the reason of the missing maxillary left central incisor. Her dental history indicated a traumatic fall, 4 years back, resulting in the avulsion of her tooth. Four years ago, this tooth had been replaced and root canal treatment had been completed by another pediatric dentist. Unfortunately, external resorption had been obtained in this tooth and a year ago patient had missed her tooth. Intra-oral examination revealed a completely healed socket in relation to the maxillary left permanent central incisor. The patient oral hygiene status was fair. Since the age of patient wasn't suitable for a fixed prosthesis or dental implant usage. FRC bridge was planned in the constricted edentulous region. In order for ruling out the tooth lose with glass fibre, flowable and A2 colored packable composites, were used for bridge application. The functional and esthetic problem of a patient was managed in the same session of appointment with FRC bridge.

Conclusion: This case report suggests an interim treatment option for the replacement of missing anterior tooth in young children. This technique does not require any tooth reduction and could be repaired, modified or removed from the abutment teeth without any damage to the sound tooth structure.

Keywords: Bridge, composite, fibre-reinforced

PP 03-01

Postoperative Ecchymosis

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Introduction: The aim of this study is to show the widespread ecchymosis in postoperative period after implant placement. In the postoperative period complications such as infection, pain, swelling, redness, ecchymosis may be seen in dental implant surgery. Postoperative complications are usually short-lived, not too severe and are threatened with the necessary precautions (cold compress application, antibiotherapy-antiinflammatory use, mouthwash use etc.) in the short time. Ecchymosis is defined as hemorrhagic blotching due to pooling of blood under the skin or mucous membrane caused by medical conditions, hematologic diseases, or trauma. The blood in ecchymosis is metabolized by the body. The ecchymosis may be blue, purple, dark blue, brown, green and yellow, and disappears in about 2 weeks.

Case Report: A 48-year-old female patient applied to our clinic for the treatment of edentulousness. We decided implant placement, after the clinic and radiological examination. The treatment plan of the patient was made with the prosthetic dentistry department. Seven implants were placed in the upper jaw under local anesthesia. When the patient came to control 1 week later, widespread ecchymosis were observed around the eyes, on the cheeks and in the neck region. PT, aPTT, INR tests were requested. The test results were normal. Patient was followed for 1 week recovered completely.

Conclusion: Implant placement is a surgical operation and postoperative ecchymosis may occur after surgery. The size of the complications can be expected to be large, so regular follow-up is necessary for management of complications.

Keywords: Implant, ecchymosis, post-op complication

PP 03-02

Evaluation of The Shade Matching Abilities of Dental Students

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Aim: The purpose of this study was to compare shade matching abilities between first grade and fifth grade dental students and evaluate the effect of education.

Materials and Methods: This study was performed in Atatürk University, Faculty of Dentistry. Participants performed the Ishihara Color Vision Test before taking part in this study. 30 first grade and 30 fifth grade normal color visioned students (60 students in total) who do not wear eyeglasses or contact lenses were participated in this study. The first grade students had not received any formal dental training in color science or shade matching procedures. All participants were asked to match 20 Noritake shade guide tabs with the corresponding shade guide successively in 10 minutes under midday light. The results were statistically evaluated with t-test and compared between the first and fifth grade students.

Results: Dental students achieved a high identification rate for tabs C4 (71.60%) and D2 (65%). The shade matching scores were 38% and 35.16% for the fifth and first grade students respectively. The difference between first grade and fifth grade dental students' score was not statistically significant ($p>0.05$). The lowest percentages of correct matching were recorded for tabs C3 (6.66%) and A2 (10%) for the first grade and fifth grade students respectively.

Conclusion: This study showed small differences in shade matching success between fifth grade students who had trained in shade matching and first grade students. Although the differences were not significant, education was still associated positively with the outcome.

Keywords: Shade guide, shade matching, dental students

PP 03-03**Masive Residual Cyst of Maxilla: Case Report**

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Introduction: Residual cysts are one of the most common destruktif-osseous lesions affecting the jaw. They are usually noticed in the toothless regions of the jaws during routine radiographic examination. They are usually asymptomatic, but it may cause expansion and swelling in jaws. The aim of this presentation is to report a massive rezidual cyst on maxilla and treatment with enucleation.

Case Report: 56-year-old male patient was admitted to our hospital because of swelling has been in the right maxillary posterior region in about a year. There was a swelling in the right vestibule mucosa and alveolar crest at the examination of the patient and there was a wide and regular unilocular radiolucent lesion on the radiological examination. In aspiration material from the lesion we saw cholesterol crystals. The lesion was surgically enucleated and cyst epithelial was extracted without any intraoperative or postoperative complication. Histopatologic was cyst. Based on clinical and radiographical findings the presented case was diagnosed as a residual cyst. There were no complication and complaint in 3-month follow-up.

Conclusion: The differential diagnosis is essential for an effective treatment. Differential diagnosis should include ameloblastoma, odontogenic keratocyst, periapical cementoma and nasolabial cysts. For deciding the treatment method, they are important that the size and location of cyst and anatomic proximity is important.

Keywords: Massive cyst, maxilla, rezidual

PP 03-04**Altering Vertical Dimension of Occlusion on Patients with Class III Malocclusion: Two Case Reports**

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Introduction: There are significant reductions in occlusal vertical dimension and angular relationships between the upper and lower jaws of patients with Class III malocclusion. Complex treatments are required in these patients who have esthetic, phonetic and chewing function problems all together.

Case Reports: In these case reports, prosthetic rehabilitations of 2 patients with anterior cross-bite and partial edentulism were presented. As the result of the measurements on vertical dimension of occlusion and free-way space of the patients who have maxillary growth restriction, it has been observed that they have inadequate free-way space. It was found that the patients had occlusal contact just in protrusion and the vertical dimensions were decreased in that position. Although orthodontic and orthognatic surgery were offered to the patients, they preferred the prosthetic treatment due to financial situation and time constraints; then it was decided to apply camouflage treatment. Temporomandibular joints of the patients were observed after applying the provisional prostheses, which were produced in the guidance of new occlusal vertical dimensions, and follow-ups were performed for 6 months and 2 months respectively. Afterwards the permanent porcelain-fused-to-metal bridges were applied to the patients. So that, the vertical dimensions of occlusion were rearranged and the esthetic problems of 2 patients caused by anterior cross-bite were eliminated.

Conclusion: After the prosthetic rehabilitations, both patients stated that they were satisfied with both esthetic and chewing function.

Keywords: Anterior cross-bite correction, Class III malocclusion, occlusal vertical dimension, prosthetic rehabilitation

PP 03-05**Prosthetic Rehabilitation of a Patient with Congenitally Missing Lateral Incisor and Multiple Diastema: A Case Report*****Berkman Albayrak, Funda Bayındır****Atatürk University, Faculty of Dentistry, Department of Prosthodontics, Erzurum, Turkey*

Introduction: Multiple diastema may be hereditary, acquired or functional and it is mostly seen in the absence of maxillary incisors. It can be treated by orthodontics, laminate veneers and direct bonding restorations when it affects esthetics.

Case Report: In this case report, the prosthetic rehabilitation of a 30-year-old female patient who has congenitally missing maxillary right lateral incisor, right first premolar and multiple diastema. In the direction of digital analysis, a wax-up was prepared for the patient and tooth dimensions were evaluated after diastema closure. Afterwards tooth preparations were made in the guidance of mock-up and the prosthetic rehabilitation was completed with 4 e.max press MT ingot laminate veneers and 3-unit e.max press bridge. The e.max restorations were cemented with dual-cure resin cement.

Conclusion: At 2 months of follow-up, the patient stated that she had no complaints and she was satisfied with the esthetics of prosthetic rehabilitation.

Keywords: Diastema closure, laminate veneer, multiple diastema, prosthetic rehabilitation

PP 03-06**Prosthetic Treatment of A Patient With Vertical Dimension Loss: A Case Report*****Büşra Tosun, Nuran Yanıkoğlu****Department of Prosthodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey*

Introduction: Tooth wear is a disease characterized by the loss of hard tissues of the teeth except tooth caries. The underlying causes are also different according to the type of wear. This case report presents a patient who needs to be increased in vertical dimension, using temporary crowns, adaptation to the new vertical dimension and treatment with permanent fixed restorations.

Case Report: A 65 year-old male patient referred to department of the prostodontics at Atatürk University, Faculty of Dentistry with the complaints of aesthetic appearance and worn in his teeth. The intraoral examination of the patient, revealed that upper and lower teeth were worn halfway through the crowns and the dentin was exposed on the incisal edges. Vertical dimension of rest of the patient was determined using the Niswonger method, occlusal vertical dimension was measured in the case of full closure. By adjusting the freeway space 3mm, the vertical size was gradually increased with temporary crowns. At the end of 5 weeks, after making sure that the patient did not develop any joint pain, the patient's permanent measure was taken and metal supported porcelain bridges were made.

Conclusion: In cases where the vertical dimension has to be increased, the permanent fixed prosthetic should not be immediately restored. First, in the long term, whether the adaptation to the new vertical dimension can be achieved or not, should be followed, and then the prosthetic treatment should be completed in a vertical dimension where the patient is comfortable. As in our case, permanent fixed prosthetic treatment by increasing the vertical dimension gradually with temporary crown is one of alternative treatment options.

Keywords: Tooth wear, vertical dimension, prosthetic treatment

PP 03-07**Investigation of Effectiveness of Adhesive Cements on the Bonding of Different Post Systems****Cenk Burak Yılmaz¹, Nuran Yanıkoğlu²***Department of Prosthodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey*

Aim: The aim of the study was to examine the effect of different post systems (cast post, prefabricated ceramic post) and three different cements (zinc phosphate, glass ionomer, and resin cement) on retention and to determine the suitable combination for retention.

Material and Methods: Ninety teeth with single root were used in the study. The crown of each tooth was removed from one mm above of the cemento-enamel junction by using a diamond bur. Endodontic treatment were performed on the teeth and post spaces were prepared by using a special drill of Cosmo post systems. The roots were embedded in acrylic blocks. The samples were divided into three groups (sandblasting/unsandblasting cast post or prefabricated ceramic post) (n=3). Each of these groups was divided into 3 subgroups for three different cements. After cementation, tensile force was applied on the samples with Instron testing machine. ANOVA and Duncan's multiple range tests were performed for statistical analysis (P = 0.05).

Results: According to the results of the variance analysis, it was found that the post type (P < 0.001), the cement type and post-cement interaction had statistically significant effect (P < 0.05) on the bond strength of post to root dentin.

Conclusions: The best retention was seen in the sandblasting cast post cemented with zinc phosphate cement and with glass ionomer cement. On the other hand, the prefabricated ceramic post cemented with zinc phosphate cement and unsandblasting cast post cemented with resin cement showed the least retention.

Keywords: Bond strength, cast post, ceramic post, dental cements, sandblasting.

PP 03-08**Difference of Saliva CGRP and Substance-P Levels After Dental Implant Surgery at First Day and Seventh Day****Dursun Anil Yıldız, Taner Arabacı, Ezgi Doğanay Yıldız***Department of Periodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey.*

Aim: Context—Calcitonin gene-related peptide (CGRP), substance P play an important role in inflammatory pain. In order to gain further insight into the role of CGRP and Substance-P in post operative pain at implant surgery, we evaluated and compared changes for these two neuropeptides at saliva with ELISA test.

Materials and Methods: This prospective clinical trial included 40 dental implant patients. All patients were assigned same painkiller and antibiotics protocol. For collection of saliva samples, patients were asked to spit directly into a specimen cup on 1st day and 7th days after surgery. Approximately 2 ml of saliva was collected. Saliva samples were immediately frozen and stored in the laboratory at -80°C until analysis by ELISA method.

Results: CGRP and Substance-p levels were significantly different at 1 and 7 days after surgery (p<0.05).

Conclusion: CGRP and substance-p saliva levels were studied earlier at migraine, headaches and rat oral mucosa. We showed that after surgery, this neuropeptides saliva levels has significantly increased at first day after oral implant surgery.

Keywords: Substance P, CGRP, postoperative pain, dental implant surgery, saliva neuropeptides

PP 03-09**Maxillary Molar Tooth Treatment Which Has Perforation and Excessive Structure Loss by Using MTA and Endocrown: A Case Report*****Esra Uluköylü¹, Hakan Arslan¹, Ertuğrul Karataş¹, Alper Özdoğan²****¹Department of Endodontics, Faculty Of Dentistry, Ataturk University, Erzurum, Turkey**²Department of Prosthodontics, Faculty Of Dentistry, Ataturk University, Erzurum, Turkey*

Introduction: In this case report is present treatment of a maxillary first molar tooth has perforation and excessive structure loss.

Case Reports: A 22-year-old female patient complaining of pain in upper left posterior region applied to our clinic. Clinical examination revealed amalgam fillings and percussion sensitivity of teeth 26. Radiographic examination revealed that the associated amalgam filling was extended to the furcation. After local anesthesia and rubber dam isolation was performed, the access cavity was opened. Perforation was seen, the canals could not be localized. The root canal and perforation area were examined in detail using cone-beam computerized tomography. According to CBCT examination, canal orifices were found with long steel roud bur.MB2 canal detected in CBCT image was found by ultrasonic. Root canals were obturated with gutta-percha and AH26 root canal sealer using the cold lateral compaction technique. The perforation area was repaired with MTA (Dentsply Tulsa Dental, OK).The other session was covered with a fluid composite (3M Espe, Kerr, USA) over the cured MTA and canal orifices. Pulp chamber was prepared with the diamond bur. The impressions were taken with additional silicone (Zhermack HD+ Elite).The endocrown restoration was produced by IPS E.max press (Ivoclar Vivadent).Endocrown was cemented with dual-cure resin cement. In the six months follow-up after completion of the treatment, there were no clinic and radiographic symptoms in patient.

Conclusions: CBCT, a three-dimensional imaging method, provides important contributions to the determination of the endodontic diagnosis and treatment protocols. Endocrowns appear to be a valuable option for endodontically treated posterior teeth with extensive loss of coronal structure.

Keywords: Endocrown, MTA, perforation, CBCT

PP 03-10**Root Canal Treatment of a Maxillary Central Incisor Tooth with Calcific Metamorphosis: A Case Report*****Esra Uluköylü, Ertuğrul Karataş, Hakan Arslan****Department of Endodontics, Faculty of Dentistry, Ataturk University, Erzurum*

Introduction: The present case report describes treatment of a maxillary left central incisor tooth with calcific metamorphosis.

Case Report: A 45-years-old female patient referred to our clinic with a chief complaint of pain in the maxillary left central incisor. On radiographic examination it was revealed that the middle third of the root canal was calcified and a lesion was present in periapical area. The patient informed us about a trauma history on anterior region few years ago. After local anesthesia application, rubber dam isolation was performed and the access cavity was prepared. The root canal could not be localized, thus a long shaft diamond round bur has been used carefully. X-rays were taken to avoid perforation. A 37% orthophosphoric acid etching was applied in the access cavity for 5 minutes and 5% citric acid was applied and activated with Endoactivator (Dentsply, Mallifier, Canada). Finally the root canal was localized and prepared using Reciproc(VDW, Munich, Germany) instruments under 2.5% sodium hypochlorite irrigation. Then, the root canal was obturated with AH Plus and gutta-percha using vertical compaction technique. In the 1 year follow-up after completion of the treatment, there was no clinical and radiographic symptoms.

Conclusion: It is important to be careful when looking for a canal in the treatment of a calfied root canal. Long shaft burs and x-rays are useful in the treatment of calcified root canals.

Keywords: Calcific metamorphosis, long shaft burs, calcified canal

PP 03-11**Non-syndromic Oligodontia: Two Case Reports****Gelengül Urvasizoğlu, Bahadır Sancar, Eyüp Candaş Gündoğdu***Ataturk University Faculty of Dentistry Department of Oral and Maxillofacial Surgery, Erzurum, Turkey*

Introduction: In this case report two female patients suffered from a non-syndromic oligodontia were presented. Oligodontia, commonly describe as a condition involving absence of six or more teeth excluding the third molar, is a rare anomaly affecting very small amount of the population. The absence of teeth can affect social relations and masticatory function.

Case Reports: 17 year old and 18 year old two female patients reported to the our clinic for a routine dental check-up. Theirs past medical history were non-contributory and family history revealed that they were born to non-consanguineous marriage with normal delivery. The patients had no history of trauma or extractions. Extra oral examination revealed a face with normal facial profile both patients. Case 1: In the first patient, as permanent teeth maxillary central incisors, left first premolar, mandibular central incisors, first premolars, first molars teeth and as primary teeth maxillary lateral incisors, canines, right first molar, second molars, mandibular canines, second molars were present during clinical examination. Case 2: In the second patient, as permanent teeth maxillary central incisors, right first molar, mandibular first premolars, first molars teeth, as primary teeth maxillary lateral incisors, canines, right first molar, second molars, mandibular central incisors, lateral incisors, canines, second molars were present during clinical examination.

Conclusions: Patients with oligodontia as a part of a syndrome may have abnormalities in other parts of the body; such as the skin, ears, eyes, and skeleton. Hence in these cases, oligodontia is not associated with any syndrome which is rare finding.

Keywords: Dental anomaly, oligodontia, tooth agenesis

PP 03-12**Treatment of Failed Horizontal Root Fracture with Intentional Replantation Technique****Hakan Arslan¹, Eyüp Candaş Gündoğdu²***¹Department of Endodontics, Dental Faculty, Ataturk University, Erzurum, Turkey**²Department of Maxillofacial Surgery, Dental Faculty, Ataturk University, Erzurum, Turkey*

Introduction: Horizontal root fractures are complex traumatic injuries that require multidisciplinary management. In this case report, treatment with the intentionally replantation of a previously failed horizontal root fracture treated patient is presented.

Case Report: A 14-year-old female patient referred to our clinic. On the patient's examination; we were detected horizontal root fracture on the middle-third of right upper central incisor. Also, we were observed intra-radicular splinting with hedstrom file and root canal treatment. However, the tooth was symptomatic and had mobility. Thus, it was decided to intentionally replantation the patient's teeth. The fractured tooth is intentionally extracted atraumatically. Then, the separated fragments are bonded with Super-Bond and root canal preparation, fiber post performed extraorally. The tooth was replanted into the socket and splinted to the adjacent teeth with ortodontics wire. 21 days after the splint was removed. The tooth was asymptomatic; there was no discoloration of the crown, no mobility, no tenderness to percussion or palpation.

Conclusion: These results obtained from the study showed that using intentionally replantation technique may be advantageous.

Keywords: Horizontal root fracture, replantation, trauma

PP 03-13**Prosthetic Treatment of a Patient with Acquired Maxillary Defect – A Case Report*****Fıras Suleyman¹, Zeynep Yeşil Duymuş², Sümeyye Cansever¹****¹Department of Prosthodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey.**²Department of Prosthodontics, Faculty of Dentistry, Recep Tayyip Erdoğan University, Rize, Turkey.*

Introduction: Acquired maxillary defects are defined by defect which occur after resection of malignant or benign tumor in maxilla. The extent of the resection is dependent upon the size, location and potential behavior of the tumor. First of all, closing the defect during surgery is a more appropriate approach, but this isn't always possible. Prosthetic obturation of the defect is required when the surgical treatment is unsatisfactory or impracticable. In this case, a patient who had previously made partial maxilla resection was given information about new prosthetic treatment because of the inability to use the prosthesis.

Case Report: A 70-year-old male patient was applied to the Department of Prosthetic Dental clinic with the complaint of a previous obturator weight. In patient history, he had stated surgical operation with the diagnosis of squamous cell carcinoma before six years ago. Clinical examination revealed abrasion artificial teeth in the the obturator used and fracture in the anterior region of the prosthesis. A new prosthesis plan has been made to remove the complaints from the patient's first prosthesis.

Conclusions: The hollow bulb obturator is lighter and the patient relaxes during function.

Keywords: Acquired maxillary defects, prosthetic treatment, tumor

PP 03-14**Ganglion Cyst of The Temporomandibular Joint: A Very Rare Case*****Binali Çakur, Furkan Cantürk****Department of Dentomaxillofacial Radiology, Faculty of Dentistry, Ataturk University, Erzurum, Turkey*

Introduction: Ganglion cysts, benign soft tissue tumors, most commonly appear on the back of the hand at the wrist joint and are very rarely encountered in the region of the temporomandibular joint (TMJ). Ganglion cysts occurring in or near to joints such as the wrist, foot or knee. Ganglion Cysts can be also found in TMJ but which is reported very few in literature.

Case Report: We report a ganglion cyst of the TMJ in a 24-year-old woman. The patient experienced pain and presented with a prominence in the left TMJ region, anterior to the tragus. She had some divergence in skin sensation in the left mental region of the mandible. In CBCT images, we saw a cystic lesion roughly 6 mm in diameter adjacent to the lateral anterior of the joint and seen a minimal cortical degeneration of the left TMJ. The MRI scans approved the mass to be a TMJ cyst, showed a rounded hypodense mass of soft tissue lateral to the right TMJ region.

Conclusion: TMJ cysts are usually asymptomatic and patients' chief complaint was a mass in the preauricular region. The patients are aware only of a lump in the preauricular region. There may be pain and obvious deformity. In our case, she complained of swelling, limited opening and painful mass in the left preauricular region of 6-month duration. Treatment is surgical but, if a diagnosis can be made, a period of conservative management is justified.

Keywords: Ganglion cyst, temporomandibular joint, CBCT

PP 03-15

A Rare Presentation of Dens Invaginatus In The Maxillar Second Molar***Furkan Cantürk¹, Nebiha Hilal Bilge¹, Fatma Çağlayan²***¹*Department of Dentomaxillofacial Radiology, Faculty of Dentistry, Ataturk University, Erzurum, Turkey*²*Department of Dentomaxillofacial Radiology, Faculty of Dentistry, Ataturk University, Erzurum, Turkey*

Introduction: Dens invaginatus, also known as dens in dente, is a rare anomaly affecting human dentition by invagination of the enamel organ into the dental papilla that begins at the crown and often extends to the root even before the calcification of the dental tissues.

Case Report: A 38-year-old man was referred to our department of dentomaxillofacial radiology. His medical history revealed he was taking antidepressant medication and he had no history of pain or swelling and traumatic injury. We authorized intraoral and extraoral examinations. Conventional routine dental panoramic film (DPR) was obtained the dens in dente in the right maxillar second molar. We present an unusual case report to focus on the radiological and clinical features of dens in dente by using DPR and CBCT.

Conclusion: The presence of dens in dente is more common in the lateral upper incisors (0.25-5.1%), being rare in molars. Early diagnosis of dens invaginatus is crucial and requires thorough clinical examination of all teeth. If there is a cavity, treatment is root filling or extraction but, if a diagnosis can be made early, a period of conservative and preventive management, fissure sealant, is justified.

Keywords: Dens invaginatus, CBCT, diagnosis

PP 03-16

An Interesting Case of Central Giant Cell Granuloma in a Patient with Amelogenesis Imperfecta***Furkan Cantürk, Özkan Miloğlu****Department of Dentomaxillofacial Radiology, Faculty of Dentistry, Ataturk University, Erzurum, Turkey*

Introduction: The central giant cell granuloma (GCG) is fairly common in the jaws and it is a nonneoplastic bone disease, probably reactive to some unknown stimulus. Usually, it occurs in persons 30 years of age or younger with painless swelling and an asymmetry in facial appearance. Amelogenesis Imperfecta (AI) is a hereditary developmental disorder affecting deposition, calcification or maturation of dental enamel in both the primary and permanent dentitions. Also called as hereditary enamel dysplasia, hereditary brown opalescent teeth.

Case Report: We report a central giant cell granuloma at the molar region in a 8-year-old child. The patient came to radiology department to routine dental check. His medical history revealed no history of traumatic injury was reported. We authorized intraoral and extraoral examinations. After thorough examination, the patient was diagnosed as having pitted hypoplastic type of AI. There is not any pain. Conventional routine dental panoramic film (DPR) presented the second molar tooth on the left side have a more pronounced radiolucent area than the right side. Then, for a detailed review, we decided to perform a CBCT images, we saw a multilocular hypodense lesion areas were observed, which affected the anterior margin of the mandibular ramus, forming buccal expansion and perforation in the mandible. GCG was reported after the histopathological evaluation.

Conclusion: Treatment is surgical but, if an early diagnosis can be made, a period of conservative management is justified. This case report focuses on the radiological and clinical features of the GCG and AI by using CBCT.

Keywords: Giant cell granuloma, diagnosis, amelogenesis imperfecta

PP 03-17**A Comparative Study of The Effects of Different LED Light Curing Units on The Surface Hardness of Different Colored Compomers**

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Aim: Colored compomers are frequently used in pediatric dentistry to increase the motivation of children. Power of the curing light and color of the restorative material play an important role in resin material polymerization. The aim of this study is to evaluate the surface hardness of three different colored compomers which were cured with three different curing units.

Materials and Methods: In this study pink, blue and A2 colored compomer samples are cured with Woodpecker, Valo and GC curing units and divided into three equal groups (n=8). For each sample upper and lower surface Vickers microhardness test values (100 gr/10 seconds) were obtained.

Results: In evaluation of the samples' lower surface hardness values, the interaction between the color of compomer restorations and curing units was found statistically significant (p=0.004). The lowest lower surface hardness values were obtained from GC curing unit and pink compomer groups. While the lowest upper surface hardness values were in GC and Valo curing units, the highest values were obtained in blue compomers. Valo curing unit represented same upper surface hardness values for different colored compomers. In pink colored compomer the difference between the upper and lower surface hardness values for all curing units were statistically significant (p<0.05).

Conclusion: In this study, it was found that the color of compomer and different LED curing units affect the upper and lower surface hardness of compomer restorations. GC curing units has the lowest surface hardness values when used with colored compomer restorations.

Keywords: Colored compomer, LED curing, Micro hardness, Polymerization, Vickers

PP 03-18**A Rare Case Report: Coronoid Process Hyperplasia**

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Introduction: Coronoid process hyperplasia (CPH) is an uncommon condition that results in limitation of mouth opening. It is based on normal or hyperplastic bony histology. The etiology of CPH has not yet been described. CPH might be unilateral or bilateral. The bilateral form is 4.1 times more frequent than the unilateral form. The peak age of diagnosis is often in the 2nd-3rd decade for both unilateral and bilateral cases. This condition is usually painless, slow and progressive that affecting mostly men. We aimed to present the clinical and radiological findings of a patient with bilateral CPH.

Case Report: A 23-year-old male patient was referred to our clinic with a complaint of limitation in mouth opening in 2017. He had no systemic disease and history of trauma. On orthopantomography and TMJ radiography taken from the patient, bilateral CPH was seen. The patient had been scanned with CBCT, and CBCT views bilateral CPH diagnosis was supported.

Conclusion: Differential diagnoses to rule out for CPH include Jacob disease, anterior disc displacement without reduction, myospasm of masticatory muscles, ankylosis, coronoid osteomas and osteochondromas. In this condition, radiographic examination is very important, because diagnosis of CPH is only possible by radiographic examination. CBCT can be used to evaluate the bone morphology in more detail, and planning surgical treatment. Early and differential diagnosis are important to improve patient's quality of life.

Keywords: Coronoid hyperplasia, coronoid impingement syndrome, elongated coronoid process

PP 03-19**Fusion of a Supernumerary Tooth with Right Mandibular Second Molar: A Report of a Rare Case****Selin Yeşiltepe, Gözde Derindağ, Nebiha Hilal Bilge, Abubekir Harorlu***Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Ataturk University, Erzurum, Turkey*

Introduction: Dental fusion is a morphological dental anomaly, commonly characterized by a clinically apparent wide tooth. It occurs because of the completely or partially union of dentin or enamel in developing tooth germs. Fusion usually seen in the anterior region of the maxilla. Besides that, fusions in molar teeth are rarely reported. In this case report we present to mandibular second molar that appeared to have been fused with a supernumerary tooth.

Case Report: A 13-year-old male patient presented to the radiology dental service to realize panoramic radiography for initial orthodontic treatment. Upon clinical intra-oral examination, supernumerary tooth was detected on the buccal aspect of the right mandibular second molar. Radiographic evaluation was unclear for this tooth's root canal morphology. So it was decided that the patient would receive a CBCT to assess the relationship between these teeth. The CBCT images revealed that the right mandibular second molar tooth did not complete root development and fusion at the root level was observed with a supernumerary tooth. The patient was referred to the orthodontic department with regular follow-up because dental abnormally had not resulted in any problem in dental health.

Conclusion: Presence of fused teeth in the posterior permanent dentition is a rare condition, but nevertheless, this is high significance in dental anomalies and can affect any tooth in the mouth. The fusing of the teeth should be correctly determined and a thorough radiographic examination must be performed before treatment for a successful result.

Keywords: Cone-beam computed tomography, dental anomaly, fusion

PP 03-20**Prosthetic Rehabilitation in a Case with Anterior Open-Bite: A Case Report****Harun Resit Bal, Nuran Yanıkoğlu***Atatürk University, Faculty of Dentistry, Department of Prosthodontics, Erzurum, Turkey*

Introduction: There is no vertical closure between the anterior teeth in the open-bite centric occlusion and it is one of the clinical findings. Many factors such as unbalanced activity in the jaw muscles, unusual language pressure, may result. Opening complaint may be skeletally or dental. Dental open-bite can be treated with prosthetic applications. The treatment of skeletally open-bite in adult patients is possible with orthognathic surgery. Aesthetic problems such as discoloration, deformity, fracture, fractures in the front teeth can be removed with dental prosthesis and much less material can be removed from the dental tissue and ceramic aesthetic treatments can be done with laminate veneer.

Case Report: A 21-year-old female patient who had an open-bite and had metal ceramic restoration for treatment was referred to our clinic with complaints of aesthetic, phonation and smell. Intraoral examination and aesthetic analysis of the patient were performed. Orthodontic and prosthetic treatment alternatives were explained. Because of the time problem, prosthetic treatment was decided. Periodontal Phase 1 treatment was performed after the existing restorations were dismantled. Temporary crown was made to reshape the soft touch. One month later, after the preparation and impression procedures were completed, the permanent restorations were completed.

Conclusion: The patient's 3-month clinic follow-up did not encounter the aesthetic, function, and phonation problems. It was determined that marginal alignments with veneers were acceptable.

Keywords: Open-bite, skeletally open-bite, aesthetic

PP 03-21**Detailed Examination of Osteochondroma on the Left Mandibular Condyle by Cone Beam Computed Tomography: A Case Report*****İrfan Sarıca, Saadettin Dağistan****Department of Dentomaxillofacial Radiology, Faculty of Dentistry, Ataturk University, Erzurum, Turkey*

Introduction: Osteochondroma is one of the most common benign tumours of the long skeleton, but is rare in the maxillofacial region. The sites most commonly reported in the mandible are the condyle and coronoid process, and typical features are progressive asymmetry, pain, masticatory problems, malocclusion and dysfunction of the temporomandibular joint.

Case Report: A 26-year-old female patient was referred to our clinic due to chief complaints of pain during mouth opening. The clinical examination revealed minimal facial asymmetry with the chin point deviated to the left. Crepitus and clicking sound was observed on opening and closing the mouth. A panoramic image revealed an irregular bony outgrowth on the left condylar head. The better assess the location, size and this view of the lesion or to perform differential diagnosis was scanned cone-beam-computed-tomography(CBCT) of the patient. CBCT showed a large bony mass arising from the left mandibular condyle extending medially and superiorly to the temporal bone. The lesion density was continuous with the structures of the mandibular condyle. With additional imaging of CBCT and three-phase bone scan, tentative diagnosis of osteochondroma or osteoma on the left mandibular condyle was made. Histopathological evaluation of the patients who were operated surgery has emerged as a result of the diagnosis of osteochondroma.

Conclusion: CBCT is an alternative modality to CT or MRI that should be performed in all cases of suspected osteochondroma of the mandibular condyle. Also CBCT for further evaluation, is an useful diagnostic tool for definite anatomic position, adjacent, size determined and 3D image creating.

Keywords: CBCT, mandibular condyle, osteocartilaginous exostosis, osteochondroma

PP 03-22**Mesiodens: A Case Report*****Gelengül Urvasızoğlu, Bahadır Sancar, Kemal Karaköse****Faculty of Dentistry Ataturk University, Maxillofacial Surgery, Erzurum, Turkey*

Introduction: Purpose of this case report; surgical treatment of mesiodens. Supernumerary teeth located maxillary midline between central incisors are called as mesiodens. Generally, they remain asymptomatic and are discovered during routine radiographic examination. The common complications of mesiodens are retention of the primary tooth, delayed eruption of the permanent tooth, ectopic eruptions, diastema, follicular cysts and other alterations, requiring surgical or orthodontic interventions.

Case Report: A 9-year-old male patient admitted to our clinic due to midline diastema between the maxillary central incisors. Diastema was seen in clinical examination. A supernumerary tooth was seen between the central teeth on panoramic radiograph. It was decided to extraction the mesiodens under general anesthesia because of incompatible child. Palatal mucoperiosteal flap was elevated. Mesiodens was extracted and palatal flap was closed primary and sutured with 3.0 silk suture. The operation was performed without any intraoperative or postoperative complication.

Conclusion: Early diagnosis of the supernumerary teeth are important to avoid complications like these malocclusion, displacement of adjacent teeth and impaired esthetics. Because of possible complications, mesiodens should be removed surgically.

Keywords: Mesiodens, oral surgery, supernumerary

PP 03-23

Effects of Advertisements and Dentists Choosing Dental Hygiene Products***Kübra Cantürk¹, Furkan Cantürk², Muhammet Atılğan³, Gizem Gündüz⁴, Hande Sarıcan⁵, Şebnem Selin Yılbaş⁶***¹Department of Operative Dentistry, Faculty of Dentistry, Ataturk University, Erzurum, Turkey²Department of Dentomaxillofacial Radiology, Faculty of Dentistry, Ataturk University, Erzurum, Turkey³Department of Periodontology, Faculty of Dentistry, Mustafa Kemal University, Hatay, Turkey⁴Department of Periodontology, Faculty of Dentistry, Marmara University, Istanbul, Turkey⁵Department of Periodontology, Faculty of Dentistry, Istanbul University, Istanbul, Turkey⁶Department of Prosthodontics, Faculty of Dentistry, Istanbul University, Istanbul, Turkey

Aim: Our survey goals are determine the role of advertisements on elections and to determine by which criteria individuals choose oral hygiene products and to direct the content of advertisements and dentists to ensure community awareness.

Materials and Methods: 450 surveys were conducted in different cities. In describing the categorical changes, the percentages and frequencies were used as explanatory statistical data. Mean and standard deviation were used to show continuous variables. The obtained data were evaluated statistically by Pearson chi-square test. Significance is $p < 0.05$.

Results: According to the descriptive statistical results, 78.2% of the respondents do not find the ads reliable. 88.4% of those who find it reliable find toothpaste advertisements effective. Only 21% find the dentists in the toothpaste advertisements trustworthy. As the age of participants increases, the rate of who believing dentists in advertisements decrease, is statistically significant. ($p < 0.05$) Dentists in the selection of toothpaste are the third effective. The most of the family and the environment, then the ads. We present to select the most effective visuals from 24 different subjects from various advertisements; first three of results are; aesthetic changes, health information, and experimental ads. The advertisements with celebrity and dentists are in the 5th and 6th place

Conclusions: Advertisements reliability have been found to be influenced by age, gender, education and level of income. The use of dentists in toothpaste advertisements can reduce the reliability to dentists. According to the data, increasing the efficiency and reliability of the advertisements, selection of ads content is important.

Keywords: dental advertisements, oral hygiene products, dentists role

PP 03-24

Gender Differences in The Articular Eminence Inclination and Space of The Temporomandibular Joint in Generalized Joint Hypermobility***Kübra Törenek Ağıрман, Binali Çakur****Dentomaxillofacial Radiology, Faculty of Dentistry, Atatürk University, Erzurum, Turkey*

Aim: Generalized joint hypermobility (GJH) is a benign hereditary disorder characterized by increased joint mobility in numerous joints. The aims of this study was a radiological examination of the articular eminence inclination and space of the temporomandibular joint in GJH patient who has temporomandibular joint subluxation (TMJS).

Material and Methods: 33 patients (22 females, 11 males) with GJH who admitted to our clinic with the complaint of TMJS were included in the study. The eminence inclination and the joint space were measured on the cone-beam computed tomography (CBCT).

Results: In this study, there was no statistically significant difference among sex and all measurements and age. However the eminence inclination was higher in females than in males, but space values and age were higher in males than females in both joints (left and right). There was found statistically significant correlation between the superior joint space (SS) and the age, bf (best fit) angle, posterior joint space (PS) ($p < 0,05$).

Conclusion: Gender has no difference in articular angles [bf, tr (top roof)] and joint spaces (AS, SS, PS) in patients with both GJH and TMJS. However, in females with GJH, the articular eminence is more perpendicular and the temporomandibular joint spaces are low. But, for more general conclusions, it is suggested that studies should be carried out that the number of male and female patients is equal and higher.

Keywords: Generalized joint hypermobility, subluxation, temporomandibular joint

PP 03-25**Esthetic Rehabilitation of Anterior Teeth with Severely Decayed. A Case Report*****Merve Nur Yılmaz, Pınar Gül****Department of Restorative Dentistry, Faculty of Dentistry, Atatürk University, Erzurum, Turkey*

Introduction: The recovery of the natural tooth aesthetics is becoming increasingly important in dental practices.

Case Report: This case report discusses the application of direct composite laminate veneer in the treatment of severely decayed anterior teeth. After detailed dental and medical anamnesis was taken from patient who came to our clinic with aesthetic justification, direct composite laminate veneers were planned. The treatment was completed with two sessions. The functional and esthetic expectations of the patient were satisfied and the patient was followed up.

Conclusion: Direct composite laminate veneer applications can be preferred because of immediate aesthetic outcome, rapid application time and relatively low cost.

Keywords: Case report, composite resin, dental caries

PP 03-26**Osteoradionecrosis of The Mandible Following Laryngeal Radiotherapy*****Muhammed Enes Naralan, Ozkan Miloglu, Binalli Cakur****Maxillofacial Radiology, Faculty of Dentistry, Ataturk University, Erzurum, Turkey*

Introduction: Osteoradionecrosis is one of the most important and a serious complication of patients undergoing radiation therapy, and this situation is disturbing patients as much as doctors. Osteoradionecrosis is a complication that can usually occur in patients who are treated with radiation therapy also it can occur in spontaneously.

Case Report: A 51-year-old male patient admitted to our clinic who has been diagnosed with larynx carcinoma for the last two years. Intraoral inspection showed us, in the right lower first premolar region there is a painful lesion on palpation, with partial bony surfaces with a flow of pus in. The area of destruction revealed by panoramic and periapical film from the lesion area was diagnosed with osteoradionecrosis with the help of cone beam computerized tomography.

Conclusion: It was understood that performed intraoral examination showed that the patient did not pay attention to oral hygiene. Osteoradionecrosis has multiple causes yet oral hygiene can be control by the patient. Providing good oral hygiene in patients receiving radiotherapy may possibly prevent such possible poor outcomes from occurring.

Keywords: Osteoradionecrosis, radiotherapy, oral hygiene, dental trauma

PP 03-27

Female and Male Temporomandibular Joint Patients Marital Status***Muhammed Enes Naralan, Binali Çakur, Özkan Miloğlu****Maxillofacial Radiology, Faculty of Dentistry, Ataturk University, Erzurum, Turkey***Aim:** Investigation of the marital status of temporomandibular joint patients applied to the clinic.**Materials and Methods:** The clinical status of 85 patients (64 female patients, 21 male patients) who were applied to the clinic was learned according to the information obtained by the clinical practitioner. The patients were grouped as single women, married women, single men and married men. Obtained descriptive percentages have been calculated.**Results:** According to the calculated results, 63.5% of temporomandibular joint patients were single and 36.5% were married. Also, the grouping rate of all groups according to the patients; the rate of single females was 48.2%, the rate of married females was 27.1%, the rate of single males was 15.3% and the rate of married males was 9.4%.**Conclusions:** It has been observed that there is a relationship between temporomandibular joint patients and their marital status. Especially the single females (48.2%) had a high ratio compared to the other groups, and the high ratio was found among the single females of both sexes (63.5%).**Keywords:** Temporomandibular joint, marital status, gender

PP 03-28

A Case Report: Coronally Positioned Flap with Connective Tissue Graft***Mustafa Şimşekyılmaz, Abdulhakim Günay, Seçkin Onur Akarken, Didem Özkal Eminoğlu****Periodontology Department, Faculty of Dentistry, Ataturk University, Erzurum, Turkey***Introduction:** Gingival recession is apical migration of junctional epithelium, leading to unaesthetic appearance and root hypersensitivity. Although several surgical procedures have been used to achieve predictable root coverage, these include pedicle grafts with or without connective tissue grafts, free gingival autograft, connective tissue grafts, coronally advanced flaps alone coronally positioned flap with connective tissue graft. Hence, the aim of the present case report was to clinically evaluate the management of root coverage (Miller Class I) by coronally positioned flap with connective tissue graft.**Case Report:** A 35-year-old patient presented to our clinic with a complaint of dental sensitivity. As a result of clinical and radiological examinations, we decided to treat coronally positional flap with connective tissue graft for No. 22. Vertical incisions along the mesial and distal sides of the tooth with a sulcular incision and the flap removed. Subsequently, the connective tissue graft was obtained from the left palatal region of the patient. First, the connective tissue graft was stitched with the resorbable thread on the patient's receiving site. Then the flap was stitched with polypropylene suture to position it in the coronally. Routine suggestions were made to the patient. The patient was called for control a week later and sutured.**Conclusion:** The results of this case report favor the theory that root coverage with connective tissue graft could produce an increase in root coverage and keratinized tissue. Based on this case report, Miller Class I recession defects can be treated successfully when connective tissue graft is combined with coronally positioned flap.**Keywords:** Gingival, recession, connective tissue graft

PP 03-29**Complete Gernation of Maxillary Incisor with Separate Root Canal: A Case Report****Selin Yeşiltepe, Nebiha Hilal Bilge, Fatma Çağlayan***Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Ataturk University, Erzurum, Turkey*

Introduction: Gernation occurs when a single tooth bud attempts to divide by invagination resulting in two completely or incompletely separated crowns with a single root or root canal. Clinically seen as wide crowns and the tooth count is evaluated as normal when the anomalous tooth is counted as one. In this case report we present complete gemination of maxillary central incisor tooth.

Case Report: A 8-year-old male patient presented to the dental clinic with a complaint of enlarged maxillary incisor. The patient was healthy with no reported history of orofacial trauma. Upon clinical intraoral examination revealed that the right central incisor appeared to have increased mesiodistal dimension with slight notching present in the incisal region. Radiographic evaluation revealed two separated roots of the right maxillary incisor. In the CBCT sections, it was determined that the right maxillary central incisor had two separate roots and root canals. Tooth count was normal when the anomalous tooth is counted as one. It was evaluated as complete gemination. Regular follow-up was recommended because dental anomaly did not lead to a probing for dental health at this time. The patient was directed to the relevant departments for the other teeth.

Conclusion: Even if it is difficult the recognition and treatment of such anomalies, detailed examination should be made and a thorough radiographic examination must be performed before treatment for ensure proper functional and esthetic satisfaction.

Keywords: Dental anomalies, gemination, CBCT

PP 03-30**Temporary Restoration of Maxillary Lateral Incisor Loss Using a Fiber Reinforced Adhesive Bridge: Two Case Reports****Özge Sancaktar, Funda Bayındır***Atatürk University Faculty of Dentistry, Departments of Prosthodontics, Erzurum, Turkey*

Introduction: Conventional fixed prosthesis or single implant fixed crown may be considered as a treatment option for the treatment of edentulous area in single tooth deficiency. However, as an alternative treatment, a fiber-reinforced adhesive bridge can be applied as a conservative approach.

Case Reports: Case 1: In this case report, a 17-year-old male patient was applied for esthetic loss due to maxillary left lateral tooth missing congenitally, after cleft lip palate treatment at Orthodontics Department Case 2:A 17-year-old female patient was applied to our clinic for the treatment of aesthetic loss due to maxillary left lateral tooth loss. In this case of anamnesis from the patient, root canal treatment was performed on the tooth, but the prognosis of the tooth was not good and the tooth was extracted. For implant treatment the patient's age was not appropriate. For these reason, temporary fiber reinforced bridge was applied for the patient until implant treatment. Fiber reinforced adhesive bridges were cemented with self etch dual cure resin cement by supporting the palatinal surfaces of the teeth 21 and 23. Occlusion was checked and the restoration was completed. Fiber-reinforced adhesive bridges are considered a good treatment option in cases where a temporary use is planned. In our study, there was no functional and aesthetic problem in the fiber-reinforced adhesive bridge after the patient's follow-up.

Conclusion: The use of this conservative approach in the treatment of provisional process is very important in the meeting of the aesthetic and functional needs of the patient.

Keywords: Adhesive bridge, cementation, fiber reinforced

PP 03-31

Prosthetic Rehabilitation of a Patient with Flabby Ridge: A Case Report***Zeynep Yeşil Duymuş¹, Firas Suleyman²***¹*Department of Prosthodontics, Faculty of Dentistry, Recep Tayyip Erdoğan University, Rize, Turkey.*²*Department of Prosthodontics, Faculty of Dentistry, Atatürk University, Erzurum, Turkey.*

Introduction: Retention and stability are important factors affecting the success of total prosthesis. The presence of hyper mobile soft (fibrous) tissues on the alveolar ridge lead to difficulty in construction and using the prosthesis. This type of hyper mobile soft tissue occurs depending on resorption of the underlying bone, presence of pathological occurrences, systemic diseases or using a bad-made prosthesis. The impression to be taken in the presence of fibrous tissue requires special methods. In this case report was given information about selective pressure impression method applied to patient with hyper mobile soft tissue in the anterior region of the maxilla for prosthesis construction.

Case Report: A 67-year-old female patient was applied to the Department of prosthodontics clinic with the complaint of previous prosthesis. In the clinical examination of the patient, fibrous ridge was detected in the anterior region of the maxilla and new prosthesis was made to remove the complaints.

Conclusions: Using selective pressure impression method in patients with flabby ridge increase their prosthesis satisfaction

Keywords: Fibrous tissue, impression, prosthetic treatment

PP 03-32

Treatment of a Hopeless Teeth Using Intentional Replantation Procedure: Case Report***Hakan Arslan¹, Ertuğrul Karataş¹, Mustafa Gündoğdu², Muhammed Salih Karaavcı³, Gizem Tas¹***¹*Department of Endodontics, Dental Faculty, Ataturk University, Erzurum, Turkey*²*Department of Prosthodontics, Dental Faculty, Ataturk University, Erzurum, Turkey*³*Department of Maxillofacial Surgery, Dental Faculty, Ataturk University, Erzurum, Turkey*

Introduction: The present case report describes management of an endodontically treated maxillary first premolar indicated using intentional replantation procedure.

Case Reports: A healthy 30 year-old male patient was referred to the School of Dentistry of Ataturk University for extraction of the tooth 24. Clinically, an unrestorable deep caries of the palatal and mesial region and an old disto-occlusal composit resin restoration of the tooth were observed. The tooth was not sensitive to percussion and palpation. Radiographically, periapical radiolucencies were observed at the apexes of the tooth. The level of the tooth in palatal and mesial region was under the bone level. The entire surgical procedure was done under microscopic vision. After administering local anesthesia, the tooth was atraumatically extracted. The root canal treatment, retrograd cavity preparation and filling, and composite resin restoration were performed extra-orally. Semi-rigid splinting was done using a fiber-reinforced, composite-resin bonded splint. The splint was removed after 25 days. There were no signs of periapical infection and the gingiva had healed. The patient was referred to a prosthodontist for crown preparation. A three month recall radiography and absence of any symptoms indicated satisfactory treatment outcome.

Conclusions: Intentional replantation could be considered as an alternative treatment option for endodontically treated hopeless teeth.

Keywords: Conservative treatment, endodontics, intentional replantation

PP 03-33**Retreatment of Maxillary Lateral Incisor Treated with Previously Regenerative Endodontic Procedure****Hakan Arslan¹, Eyup Candas Gündoğdu², Mustafa Gündoğdu³, Gizem Taş¹, Ertuğrul Karataş¹***1Department of Endodontics, Dental Faculty, Ataturk University, Erzurum, Turkey**2Department of Maxillofacial Surgery, Dental Faculty, Ataturk University, Erzurum, Turkey**3Department of Prosthodontics, Dental Faculty, Ataturk University, Erzurum, Turkey***Introduction:** The aim of this study is to present retreatment of a mature permanent maxillary incisor treated with regenerative endodontic protocol previously.**Case Report:** A healthy female patient was referred to the Department of Endodontics at the School of Dentistry of Ataturk University for evaluation and treatment of left maxillary incisor. The tooth was asymptomatic to percussion and palpation. Radiographically, revascularization treatment of teeth 11, 21 and 22 was shown. The radiograph has shown failure of the revascularization therapy of tooth 22 due to the horizontal fracture. At the first appointment, the tooth was isolated with a rubber dam. After access cavity preparation, MTA in the cervical zone was removed with ultrasonic tips. The working length was estimated using an apex locator and confirmed with periapical radiographs. Canal was prepared using Reciproc (VDW GmbH, Munich, Germany) rotary files and K-files with 2.5% sodium hypochlorite, followed by 1% citric acid and a sterile saline solution. After root canal obturation a fiber post was bonded to the canal and the access cavity was sealed with composite resin. Finally, patient was referred to a prosthodontist for crown preparation. After six months later, the tooth was asymptomatic clinically and radiographically.**Conclusion:** Retreatment of failed regenerative endodontic protocol has some challenges. In this case report, these challenges were successfully managed.**Keywords:** Endodontics, regenerative endodontic protocol, retreatment**PP 03-34****Non Surgical Endodontic Treatment of a Large Periradicular Lesion: A Case Report*****Hatice Sağlam, Esra Uluköylü, Ertuğrul Karataş***
*Department of Endodontics, Ataturk Univesity, Erzurum, Turkey***Introduction:** In this case presents, non surgical endodontic treatment of mandibular right incisor tooth with mobility and large periapical lesion by using cold lateral compaction technique with peridontal splinting.**Case Report:** A 25 -year-old male patient was referred to our clinic with severe pain on the mandibular first right incisor tooth. In the clinic examination there was no swelling on the region. Tooth showed sensitivity to percussion and palpation. In the radiografic examination there was a large periapical lesion around apex of mandibular first right incisor tooth. When the patient came our clinic, the first attempt was made by another dentist. In the first visit; after rubber dam isolation, the Access cavity was performed with a diamond bur. Canal preparation was made with rotary systems. Calcium hydroxide was placed and the tooth was temporarily filled. Splint was made between the left second incisor to the right second incisor because of the mobility of the tooth. After 7-10 days later second visit was performed. At the second visit there was no pain and sensitivity to palpation or percussion. The root canal was obturated with gutta-percha and sealapex root canal sealer using the cold lateral compaction technique. Splint was removed after one week later because there was a little mobility. After eight month follow-up there was observable healing in the lesion. Tooth was asymptomatic and patient has no complaint.**Conclusions:** Healing was achieved without any need for further endodontic surgical intervention after 8 month. Even in the presence of a large periapical lesion, the appropriate diagnosis and treatment of the infected root canal system allowed complete healing without surgical procedures.**Keywords:** Calcium hydroxide, endodontic treatment, periapical lesion

PP 03-35**Endodontic Management of a Mandibular Second Premolar with Three Root Canals*****Gizem Taş, Hakan Arslan****Department of Endodontics, Dental Faculty, Ataturk University, Erzurum, Turkey*

Introduction: Success of endodontic treatment depends on the knowledge of root canal anatomy. This is especially essential in cases where extra root canals are expected. The purpose of this clinical report was to present the management of a mandibular second premolar with three root canals.

Case Report: A 25-year old male with non-contributory medical history came to the Faculty of Dentistry, Ataturk University, Erzurum, Turkey, for dental examination. Clinically, it was observed that the pulp was exposed by a carious lesion in mandibular left second premolar. Tooth 35 showed no response to cold and electric pulp testing and was not sensitive to percussion and palpation. Based on the clinical and radiographic findings, a diagnosis of asymptomatic apical periodontitis of tooth 35 was made. Access opening was done under local anesthesia after rubber dam isolation. After removing the coronal pulp, three canals (mesiobuccal, distobuccal and lingual) were detected. Root filling material in the coronal of lingual canal was removed with peeso reamer, such that at least 5 mm of apical gutta-percha remained. A fiber post was bonded to the canal and the access cavity was sealed with composite resin. The patient was referred to a prosthodontist for crown preparation. A ten month recall radiography and absence of any symptoms indicated satisfactory treatment outcome.

Conclusion: The clinicians should be aware of the possible variations of the root canal systems.

Keywords: Endodontics, premolar, three root canals

PP 03-36**Diastema Closure with a Direct Technique Approach*****Mehmet Şerif Akdeniz, İdris Kavut, Mehmet Uğur****Department of Prosthodontics, Faculty of Dentistry, Yuzuncuyil University, Van, Turkey*

Introduction: Diastema closure is one of the most demanded treatments in aesthetic dentistry. Ideally, orthodontic treatment must be accomplished to give proper space relationships and good occlusion but in some cases this is not possible and we need the help of the restorative treatment.

Case Report: A 26-year-old male patient applied to Department of Prosthodontic, Faculty of Dentistry Yuzuncuyil University to close the diastases between the anterior teeth of the maxillary. There was no systemic discomfort in the examination of the patient and there was good oral hygiene and Class 1 relationship between the teeth. It was found that there was no parafunctional habit in the patient. To see the final form of treatment, before taked impression of the teeth that was sent to the laboratory to make wax up. At chearside silicone index prepared from wax-up. It was decided to close diastemas with composite material under the guideline of silicone index. Left and right maxillary central, lateral, canin and first premolar etched with 37% phosphoric acid 30 seconds. Afterwards, thoroughly rinse off the etchant with water spray and dry the tooth surfaces with oil-free air. The etched enamel surface have a chalky white appearance. Then the surfaces of all the teeth were bonded. (Adper™ Single Bond Plus Adhesive Refill) and diastemas closed with composite material (3M Filtek Ultimate) to provide aesthetic rehabilitation. After contouring, finishing, and polishing anterior composites the desired aesthetic expectation was achieved.

Conclusion: The use of composite materials in closing the diastemas in the anterior teeth provides both aesthetic results and non-invasive option.

Keywords: Aesthetic, composite, diastema, non-invasive