ABSTRACTS OF ORAL PRESENTATIONS

Field of dentistry: PEDIATRIC DENTISTRY
Type of presentation: Oral presentation

ACUTE APICAL ABSCESS IN AN ADOLESCENT - CASE REPORT

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ABSTRACT

Introduction: Apical abscess is an acute inflammatory condition caused by pulp necrosis where purulent exudate accumulates inside the alveolus at the tip of a non-vital tooth. Therapy of an acute apical abscess includes incision and drainage, endodontic treatment of a non-vital tooth or its removal, along with pain control with analgesics. A localized lesion with adequate drainage does not require antibiotic therapy. Objective: Presentation of a clinical case of acute apical abscess of tooth 36 in an adolescent.

Case report: A 15-year-old female patient was admitted to the pediatric and preventive dentistry department of the Faculty of Dentistry with Dental Clinical Center of the University of Sarajevo complaining to the area of tooth 36. A clinical examination revealed swelling in the area of the periapical part of tooth 36 from the vestibular and oral sides, where tooth was sensitive to vertical and horizontal percussion. The swelling on the vestibular side was in the absconding phase. The X-ray findings showed periapical changes and a larger Para radicular change around the distal roots extended towards the mesial side and involved the furcation of the tooth. The patient was treated with conventional multisession endodontic treatment of tooth 36 with chemomechanical root canal treatment and NaOCl irrigation, and the use of calcium hydroxide as an intracanal medication. Oral clinical symptoms completely resolved 7 days after root canal mechanical instrumentation. Almost complete regression of periapical and pararadicular bone changes in tooth 36 occurred 4.5 months after the start of treatment.

Discussion and conclusion: Cases of acute apical abscess end with complete healing of the affected periapical area, or extraction of the causative tooth. The outcome depends on the possibility of performing appropriate endodontic treatment with appropriate instruments and medications, the type of periapical change and the ability of the patient's immune defense response.

Key words: acute apical abscess, adolescents, endodontic treatment, NaOCl, calcium hydroxide

Field of dentistry: PEDIATRIC DENTISTRY
Type of presentation: oral presentation

ORAL HEALTH STATUS IN CHILDREN AT PUBLIC KINDERGARTEN IN MUNICIPALITY OF SARAJEVO TOWN IN 2023.

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ABSTRACT

Introduction: Children's preschool age is a suitable period of time in which it is still possible to act on the development of healthy lifestyle habits within the family and to change wrongly determined oral health habits. Their correct and timely application leads to a reduction in the incidence of caries in the primary dentition, i.e. a reduction in the prevalence of caries in the permanent dentition.

Aim: To compare the state of oral health of preschool children in kindergartens by municipality in Sarajevo Canton.

Respondents and methods: The research included preschool children aged 3 to 6 years, whose oral health status was assessed during 2023. At the same time, their parents and kindergarten teachers were educated

Results: General trends after the analyzed results speak in favor of the fact of worse oral health in preschool children with more frequent visits to the dentist. The oral health of respondents in OJ Centar 2023 is slightly better in contrast to OJ Novi Grad, OJ Novo Sarajevo and OJ Stari Grad. Oral care is slightly lower in 2023 in OJ Centar, except for boys, and OJ Novo Sarajevo, except for respondents aged 3 and 4, while oral care is slightly higher in OJ Stari Grad and OJ Novi Grad, except for respondents aged 6. The number of carious first permanent molars in 6-year-olds increased in 2023 in all municipalities.

Conclusion: Kindergartens are a suitable field for the application of public health programs for the prevention of dentooral diseases. Field examinations of preschool children have the potential to bring them closer to the dental clinic and treatments. The resulting application of preventive measures within the family and environment will lead to the improvement and promotion of children's oral health.

Key words: dental caries, preschool age, oral health, educational institutions

Field of dentistry: PEDIATRIC DENTISTRY
Type of presentation: oral presentation

PERCEPTION OF DENTAL AESTHETICS IN CHILDREN

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ABSTRACT

Aim: The aim of this study was to examine the perception of dental aesthetics in children.

Materials and methods: 44 children, aged 4-15 years, participated in this research, none of whom were orthodontic patients. The research consisted of an interview, in which the children were asked questions, and a drawing on the topic of what is a "beautiful and ugly" tooth for them. The questions were designed in such a way as to reflect the perception, knowledge and attitude of children related to dental aesthetics, as well as satisfaction with their own appearance in the context of dental aesthetics. Drawings and answers are classified according to Piaget's classification of cognitive development, according to the age of the subjects.

The questions for the parents were related to the parents' practice related to visiting the dentist and the caries experience of the children so far.

Results: The research results showed that all respondents, regardless of gender and age, showed the ability to perceive and express their attitudes regarding the concepts of "beautiful" and "ugly" in the context of dental aesthetics, as well as to express their attitude and satisfaction/ dissatisfaction with one's own appearance.

Conclusion: These results suggest that the experience of beauty and the feelings associated with dental aesthetics are universal, independent of gender and age group, and that children possess the ability to distinguish what they consider beautiful or ugly according to their age. Also, the results showed that children are able to express satisfaction with their own appearance.

Keywords: children; dental aesthe

Field of dentistry: CHILDREN'S DENTISTRY
Type of presentation: oral presentation

PUFA/PUFA INDEX- AN INDICATOR OF THE CLINICAL CONDITION OF UNTREATED CARIES, DECIDUOUS, MIXED AND PERMANENT DENTITION IN CHILDREN AGED 3 TO 18 YEARS IN THE SARAJEVO CANTON OF BOSNIA AND HERCEGOVINA

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ABSTRACT

Aim :The aim was to present the PUFA/pufa indeks of deciduous, mixed and permanent dentition in children aged 3-18 years in the Sarajevo Canton. The PUFA/pufa indeks shows the severity of oral conditions that are the result of untreated caries.

Method: The sample was collected at the Clinic of Pediatric and Preventive Dentistry at the Faculty of Dentistry with the Dental Clinical Center, University of Sarajevo. The sample was collected for 3 months during one year, and the sample size was 400 respondents. The sample included healthy children between the ages of 3 and 18, as determined by medical history, accompanied by parents/guardians, who signed an informed consent to participate in the research. The research consisted of a clinical examination of the child and a questionnaire for the parents.

Results: From the total number of respondents who participated in the research (N=394), PUFA=0 was registered in 308 (81.2%) respondents, while 38 (9.6%) respondents had PUFA $\geqslant$ 1. Out of the total number of subjects, 195 (49.5%) subjects had pufa=0, while 117 (29.6%) subjects had pufa $\geqslant$ 1.

Conclusion: The research reveals the presence of high caries prevalence in the studied population as well as the existence of clinical consequences of untreated caries, especially primary dentition. The current situation indicates the need for significant improvement of the existing preventive and curative measures.

Keywords: PUFA/pufa index, deciduous, mixed and permanent dentition, oral health, untreated caries.

Field of dentistry: PREVENTIVE DENTISTRY
Type of presentation: oral presentation

PREVENTION AND THERAPY IN PEDIATRIC ONCOLOGY PATIENTS IN GENERAL DENTAL PRACTICE

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ABSTRACT

IIn their work, dental doctors meet children's patients as the most sensitive group of patients. Carcinomas have an extremely negative impact on the quality of life of pediatric patients and require an individual and multidisciplinary approach to the treatment of all stages of the disease.

During oncological therapy, the oral cavity is extremely sensitive. Chemotherapy and radiation therapy can lead to serious complications with a frequency of 40 to 100%. The most common are oral mucositis, xerostomia, opportunistic infections, dental hypersensitivity, developmental disorders of jaw structures, GVHD.

Before the start of oncology therapy, preventive measures should be implemented in the sense of educating the patient/parent/guardian about the importance of maintaining good oral hygiene, brushing teeth, applying fluoride and sanitizing the oral cavity before starting therapy.

In case of complications during and during the cessation of chemotherapy, the therapy is symptomatic. A therapeutic protocol is implemented, being clearly defined for each complication, from preventive brushing to the application of drug therapy.

The task of every dentist is to know the nature of malignant disease, prevention of complications and their treatment, as well as a very important psychological aspect, approach to patients and parents in difficult life situations.

Key words: oncology patients, chemotherapy, oral complications, preventive measures

Field of dentistry: ENDODONTICS
Presentation Type: Oral presentation

ENDODONTIC RETREATMENT OF UPPER FIRST PREMOLAR – CASE REPORT

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ABSTRACT

Introduction: Endodontic retreatment (ER) involves removing materials used for the definitive filling of root canals. It is indicated in all cases of inadequate root canal filling. The most common reason for failure is the entry of the bacterium Enterococcus faecalis into the root canal or periapex area due to coronal or apical leakage. Diagnosis is based on the patients' subjective symptoms, diagnostics tests and X- ray diagnostics.

Case presentation: A 30-year-old male patient reported to the clinic with pain in the area of tooth 24. The patient experienced pain and discomfort while chewing and mentioned that the tooth had been treated for an extended period. The X- ray showed inadequate root canal filling with short obturation (unfilled canals). After the diagnosis, endodontic retreatment began. Eucalyptus oil was used to soften the gutta-percha at the canal entry. Remaining gutta-percha was removed with a Hedstrom file. The canal was instrumented to size 35 with extensive use of NaOCl and 2% chlorhexidine irrigans followed by rinsing with saline and drying between NaOCl and chlorhexidine use. Tooth 24 was filled using cold lateral condensation. The follow up X- ray showed optimal root canal filling.

Conclusion: This case demonstrated the process of revising inadequate root canal filling. The primary goal was to achieve three-dimensional obturation of the canals, ensuring complete apical and coronal sealing and to facilitate proper healing of the periodontium.

Keywords: Endodontic treatment, Enterococcus faecalis, endodontic retreatment

Field of dentistry: ENDODONTICS
Type of Presentation: Oral presentation

ENDODONTIC RETREATMENT OF A PREVIOUSLY ENDODONTICALLY TREATED TOOTH WITH A PERIAPICAL LESION AND PROSTHETIC CROWN- THE IMPORTANCE OF COMPLIANCE WITH THE IRRIGATION PROTOCOL, IRRIGANT ACTIVATION

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ABSTRACT

Introduction: The access cavity through the prosthetic crown is minimally extended, and the mechanical instrumentation is limited thus questioning the irrigation and the therapy success. It has been proven that after mechanical instrumentation, about 35% of the canal walls remain untreated. In order to increase the effectiveness of irrigation and canal decontamination, irrigation should be activated by different systems. In this case, sound-activation of the irrigant with the Endo activator was used.

Case report: A man, 38 years old, came to the Clinic for Dental Pathology and Endodontics, Faculty of Dentistry with symptoms: swelling, sensitivity to percussion and palpation, tooth 12 in premature contact and it fixed prosthetic crown. Radiographically, the presence of apical radiolucency and inadequate endodontic filling, indicated for endodontic retreatment.

In the first visit, the access cavity was made with minimal extension. The revision was done using the Reciprocal technique, with the R25 instrument.

Established purulent drainage through the canal. After copious irrigation and irrigant activation (3% NaOCl, saline solution, 2% chlorhexidine), the cavity was closed using a sterile cotton swab and a temporary filling.

After 3 days, purulent exudate was present in a smaller amount, irrigation with activation was repeated. After 5 days, the canal is dry, repeated irrigation, intracanal medication - a combination of Ca(OH)2-Calxyl and 2% chlorhexidine. After 10 days, the intracanal medication was repeated because palpatory hypersensitivity is still present. After one month - endodontic treatment was completed, tooth was asymptomatic. Control images after one and two years showed healing of the periapical tissue.

Conclusion: After mechanical instrumentation, 35% of root canal walls remain non-instrumented. Irrigation alone is insufficient to decontaminate the canal. According to previous researches, the additional activation techniques are recommended in order to improve the antimicrobial, rinsing and dissolving effect in the endodontic area.

Keywords: revision, irrigation, irrigant activation, endodontic retreatment, periapical lesions

Field of dentistry: ENDODONTICS
Presentation Type: Oral presentation

DEFINITIVE FILLING OF THE MAXILLARY FIRST PREMOLAR WITH COMPLEX ANATOMICAL-MORPHOLOGICAL STRUCTURE - CASE REPORT

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ABSTRACT:

Introduction: The maxillary first premolar most commonly has two roots (60% to 80%), typically one buccal and one palatine. It is less common to have a single root (in about 30% of cases). According to various studies, in only 2% to 3% of cases, the maxillary first premolar has three roots. This occurrence is known as tooth molarization, and typically, two roots are positioned buccally and one palatine.

Case Presentation: A 20-year-old male presented with discomfort in the area of tooth 14 during chewing. A clinical examination revealed a large carious lesion. The patient was administered a local anesthetic, lidocaine with 2% adrenaline, and carious tissue removal was initiated. Complete caries removal was impossible without opening the pulp due to the presence of a deep lesion that communicated with the exposed pulp chamber. Subsequently, an access cavity was prepared, and the pulp was removed from the coronal portion with significant bleeding. Hemostasis was achieved using 2.5% NaOCl. Next, the search for root canal entries was conducted. The entry to the palatal root was immediately visible, while the entry to the vestibular canal was located slightly more mesial than in previous cases. An RVG (radio-visuographic) image was then taken using "K-file" needles with a diameter of 25#, revealing the presence of an additional vestibular canal. Upon identifying the entry to the disto-buccal canal, the initial canal patency was checked, and the working lengths of all three canals were determined. Manual mechanical preparation of the root canals ("step back" technique) was performed up to size 30# in the vestibular canals and 35# in the palatal canal. The procedure was accompanied by abundant irrigation with NaOCl. The definitive obturation was performed using the cold lateral condensation technique with gutta-percha points and "AH PLUS" sealer (Dentsply International). A follow-up RVG image showed a successful endodontic treatment of the maxillary first premolar.

Conclusion: The aim of this case report was to demonstrate that only through thorough diagnostics, proper analysis of radiographic images, and maximum dedication can a successful endodontic treatment be performed, as in the presented complex case.

Keywords: first premolar, RVG image, atypical root anatomy.

Field of dentistry: ENDODONTICS
Type of presentation: Oral presentation

SUCCESSFUL TREATMENT IN PATIENT WITH PARTIAL EXTERNAL ROOT RESORPTION CAUSED BY IMPACTED UPPER THIRD MOLAR – CASE REPORT

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ABSTRACT

Introduction: Tooth resorption represents process resulting in loss of dentin or cementum. The etiology and pathogenesis of tooth root resorption are poorly understood. Tooth root resorption is primarily asymptomatic and is revealed accidentally by radiographic examination. Diagnostic pathway in a root resorption includes history and clinical examination, and also radiographic diagnostics in order to make an accurate diagnosis.

Case presentation: A 35-year-old female presented with pain located in second upper molar lasting 10 days. During examination - an old amalgam filling with poor edge closure of the seal on the crown of the tooth affected (second upper molar). After old filling removal, a deep caries lesion was seen, and endodontic treatment commenced. Due to strong resistance during the procedure, X-ray imaging has been performed and revealed a third upper molar resorbing a distal buccal root of the second upper molar. Following extraction of the second upper molar - control x-ray two days after extraction confirmed appropriate position of emerging of third upper molar.

Conclusion: External root resorption (ERR) occurring in second molar (M2) adjacent to impacted third molar (M3) is common, especially in mandibular M2. Hence, the presence of ERR is associated with M3 impaction, a close monitoring or prophylactic removal of impacted M3 should be considered especially for the patients over 25 years and with mesial inclined and deeply positioned M3. EER in maxillary second molar is important because of its relatively high severity. In such cases, prophylactic removal of impacted M3 should be considered, especially in younger patients.

Keywords: External root resorption, third upper molar

Field of dentistry: ENDODONTICS
Type of presentation: Oral presentation

COMBINED ENDODONTIC-SURGICAL TREATMENT OF SYMPTOMATIC APICAL PERIODONTITIS WITH CYST FORMATION IN THE LOWER FRONTAL TEETH: CASE REPORT

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ABSTRACT

Introduction: The goal of this paper is to describe the endodontic and surgical course of treatment of necrotic teeth 31, 41, and 42, as well as confluent apical periodontitis in the apex of these teeth.

Case Report: A 33-year-old woman, L.A., presented to the Public Institution Health Center of theSarajevo Canton due to pain in the region of her lower frontal teeth. After an intra-oral exam and an orthopantogram (OPG) analysis, she was referred to an endodontist.

Anamnesis revealed a history of an unpleasant sensation of pressure and pain during the previous two weeks and denied systemic illness and trauma. A clinical exam and OPG analysis were conducted. On external examination, she presented extra-oral swelling of the jaw in the chin region with flattening of the mento-labial fold. On intra-oral clinical exam, the III class fillings were detected on teeth 31, 41, and 42, as well as intra-oral firm diffuse swelling of the 31-42 region. The aforementioned teeth were sensitive and without mobility on percussion. Vitality testing was negative. Radiographic examination showed a large confluent radiolucent area associated with teeth 31-42, sized 3.5x1.5 cm.

Therapy: Multiple sessions of endodontic treatment were performed. Trepanation was conducted and manual treatment of the root canals with voluminous irrigation with 3% NaOCl with an endodontic instrument size #35, and the canals were filled with calcium hydroxide. During the endodontic treatment of teeth 31 and 41, a cystic structure was identified. The dressing with calcium hydroxide-based paste was repeated three times; with the consultation of an oral surgeon, it was decided to conduct an apicoectomy. After five months, enucleation of the cyst along with apicoectomy of teeth 31, 41, and 42 was conducted, as well as filling of the root canals with phosphate cement and gutta-percha. Repeat radiographs displayed a considerable bone repair in the region of the lesion four months after surgery.

Conclusion: Multiple-session endodontic treatment is indicated in all extensive per-apical lesions.

Key words: Endodontics, Periapical Lesions, Calcium Hydroxide Medication, Apicoectomy, Cyst.

Field of dentistry: ENDODONTICS
Type of presentation: Oral presentation

ENDODONTIC TREATMENT OF A MAXILLARY SECOND PREMOLAR WITH COMPLEX APICAL MORPHOLOGY

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ABSTRACT

Introduction: This case report describes the endodontic treatment of 25 teeth with complex root canal morphology. The primary goal of this paper is to indicate diagnostic and therapeutic guidelines to help solve these endodontic challenges.

Case report: A 20-year-old female patient presents to the Clinic for Dental Pathology and endodontics with pain in the region of tooth 25. From the anamnesis, it is known that the treatment was started in another dental office, and that there is pain on biting.

Clinical examination revealed the presence of mesio and distoproximal composite fillings on tooth 25, as well as a temporary occlusal filling. The tooth is sensitive to vertical percussion, while the cold sensitivity test is negative.

The analysis of the preoperative retroalveolar RVG scan revealed intracanal filling in the coronary part of the root canal and radiolucency around the apical part of the root. It was not possible to follow the shadow of the root canal to the apex, which raised doubts about the complexity of the morphology of the canal system of tooth 25.

A diagnosis was made: previously started endodontic therapy and symptomatic apical periodontitis of tooth 25.

Aftter removing the temporary filling and washing out the previous soft filling of the root canal, a wide oval entrance to the root canal was observed. By carefully investigating the interior of the root canal in the apical part, it is possible to enter two separate root canals, which was confirmed by EAL, which measured two different working lengths. The chemo-mechanical debridement of the detected root canals is started with copious irrigation with 3% NaOCl and 40% citric acid. Alternating with mechanical processing, the irrigant is activated by an endoactivator. Ca hydroxide is applied as an intracanal medicament for 15 days. At the end of this period, the tooth is completely asymptomatic, and it is obturated using the cold lateral condensation technique. The analysis of the control RVG image shows a homogeneous obturation of the canal, which is divided into two separate canals in the apical region, and the presence of filling in one accessory canal.

The patient returned a year later for a clinical and radiographic review.The absence of signs and symptoms of periapical disease was established, while the complete repair of the bone defect was evident on the RVG scan.

Conclusion: Doctors of dental medicine should be aware of the complexity of the root canal system, as well as the fact that accessory canals can also be ways for microorganisms to spread. Discontinuity of the shadow of the root canal on the retroalveolar image is one of the radiological indicators of the complexity of the endodontic space. A great deal of patience and a good sense of touch are needed to explore canal morphology. Abundant irrigation with the use of endoactivators allows them to more easily penetrate the dentinal tubules and accessory canals and thus contribute to the success of the endodontic treatment.

Key words: apical morphology, accessory canals, irrigant activation

Field of dentistry: ORAL SURGERY AND ENDODONTICS
Type of presentation: Oral presentation

MANAGEMENT OF A PATIENT WITH MILD LUXATION FOR THE PURPOSE OF PRESERVING TOOTH VITALITY

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ABSTRACT

Introduction: Dental trauma most commonly occurs in children, and the causes are typically impacts, falls, and fights. Traumatic injuries require immediate therapeutic intervention to prevent further complications. Adequate treatment consists of emergency therapeutic procedures and long-term monitoring of the traumatized tooth.

Tooth intrusion is a complicated type of luxation injury characterized by the tooth being driven into the alveolus, which may be altered or bruised. The intruded tooth is completely stable, not sensitive to percussion, and produces a metallic sound upon percussion. Percussion testing is crucial in children as it can help distinguish between a fully intruded tooth and one that is not fully erupted. Trauma is often associated with enamel fractures and results from the application of direct force to the tooth. A common complication of tooth intrusion is ankylosis occurs damaged periodontal tissue is replaced by bone, making the treatment aimed at preventing ankylosis. The treatment approach depends on the growth and development of the tooth root.

Case Report: A 14-year-old patient visited the Department of Pediatric and Preventive Dentistry at JUDZKS, where an intrusion of tooth 21 was diagnosed. The trauma was caused by a fall from a bicycle, resulting in injury to the lip and tooth (polytrauma). Clinical examination confirmed the diagnosis of tooth intrusion and partial loosening of tooth 21. The tooth was intruded by less than 3 mm, and the patient was referred for an orthopantomogram (OPG) scan. From the mother's medical history, it was noted that the boy was fully vaccinated and had no penicillin allergies. The prescribed treatment included Duoclav 625 mg (3x1) and soft food to protect the tooth. Analysis of the OPG scan and clinical examination by an oral surgeon recommended spontaneous r-eeruption of the tooth, with no indication for flexible splinting. The first follow-up was scheduled after 7 days.

At the follow-up, approximately 1 mm of spontaneous re-eruption was observed. The patient was monitored weekly, and after one month, in collaboration with a specialist in dental pathology and endodontics, a vitality test was conducted. The test showed positive vitality for the traumatized tooth and the neighboring teeth. At the last follow-up, a new OPG scan was performed, and the vitality test was repeated for the traumatized tooth, confirming a positive result. The tooth was not sensitive to percussion or palpation. Both clinical and radiological analyses showed that the treatment was successfully completed.

It is crucial to conduct regular follow-ups to reduce the risk of complications resulting from damage to the periodontal ligament and pulp, such as discoloration, pulp necrosis, ankylosis, canal obliteration, root resorption, and transient marginal bone loss. If spontaneous re-eruption does not occur, orthodontic treatment for tooth extraction will be recommended.

Conclusion: Dental trauma is an emergency condition that requires an adequate response. The dentist must diagnose and begin treatment as quickly as possible to prevent complications. Treating dental trauma demands significant involvement from both the dentist and the patient, who will undergo long-term follow-up appointments and frequent visits.

Keywords: Dental trauma, tooth intrusion, surgical treatment, endodontic treatment.

Field of dentistry: ENDODONTICS
Type of presentation: Oral presentation

NON-SURGICAL ENDODONTIC TREATMENT OF THE LATERAL MAXILLARY INCISOR WITH PERIAPICAL LESION

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ABSTRACT

Introduction: This case report describes the endodontic retreatment of tooth 12 following a failed primary endodontic therapy.

Case presentation: Patient L.M. (43) was referred to the dental office at the Community Health Center due to a crown fracture of tooth 12, which was planned for prosthetic restoration. The dental history revealed that tooth 12 had been treated 8 years ago and was asymptomatic.

Clinical examination revealed a crown fracture of tooth 12, and a retroalveolar X-ray showed the presence of inadequate endodontic filling and a clearly defined periapical lesion measuring at 3 x 3 mm in diameter above tooth 12.

During the first visit, the definitive filling was revised with abundant irrigation of the root canal using 3% NaOCl. The working length was determined using an apex locator, and the canal was manually treated to the full working length. In the same visit, an intracanal medication of calcium hydroxide (Calxyl, OCO-Praparate GmbH, Germany) was applied.

During the second visit, after 15 days, a follow-up X-ray showed that biological filling had extended into the periapical space and that the periapical lesion had been reduced. Abundant irrigation and medication placement were repeated.

During the third visit, a month after the start of the treatment, the definitive filling of the root canals was applied using sealer (AH Plus, Dentsply Maillefer, Tulsa, OK, USA) and gutta-percha using the lateral condensation technique. A control X-ray of the filling was preformed, and the patient was referred to the Prosthetics Department for further treatment.

Conclusion: Repeated orthograde endodontic treatment is indicated when the previous treatment was clearly inadequate. General practice dentists can perform these procedures if they have been appropriately trained and have acquired necessary experience, including availably of necessary and appropriate.

Keywords: endodontic retreatment, periapical lesion, endodontic therapy, apex locator, retreatment.

Field of dentistry: ENDODONTICS AND DENTAL PATHOLOGY
Type of presentation: Oral presentation

MULTIDISCIPLINARY APPROACH TO RESOLVING COMPLEX PATHOLOGY IN THE UPPER CENTRAL INCISOR AS A RESULT OF TOOTH TRAUMA

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ABSTRACT

Introduction: Root resorption is the loss of hard dental tissue due to odontoclastic activity. If the resorption occurs inside the tooth, on the canal wall, it is described as internal root resorption, while resorption occurring on the external surface of the root is described as external root resorption. The etiology is unclear. Several potential predisposing factors have been suggested, including traumatic tooth injuries and pulp inflammation as a tissue response to infection approaching the resorption area.

Case Presentation: A 13-year-old female patient presented to the "Dr. Bećirović" clinic with pain and gingival swelling in the region of the upper central incisors. After clinical examination, analysis of radiographs (RVG, CBCT), and consultation with an endodontic specialist, a treatment plan was formulated. The planned treatment included periodontal therapy, elevation of a mucoperiosteal flap, and repair of external resorption on tooth 11 (using MTA and a collagen resorbable membrane) to ensure a "clean" endodontic space. The complete endodontic treatment protocol was followed, and final canal obturation was performed using the main gutta-percha point (30/04) and a warm gutta-percha system. Following endodontic treatment and control radiographs, the tooth was restored with a composite filling.

Conclusion: Tooth resorption is a pathological reaction that, if left untreated, leads to tooth loss. The goal of therapy is to halt the resorptive process and preserve tooth structures. After the therapy, the patient was symptom-free (pain, swelling). Control radiographs showed recovery of the surrounding bone of tooth 11, providing hope that the multidisciplinary approach to treating the resorption of tooth 11 was successful and yielded positive results. The patient requires further monitoring, with control radiographs to be taken in six months' time and again after a year.

Keywords: Trauma, MTA, irrigation, obturation, monitoring.

Field of dentistry: ENDODONTICS
Type of presentation: Oral presentation

ENDODONTIC RETREATMENT OF UPPER FRONTAL TEETH WITH LARGE PERIAPICAL LESIONS: CASE REPORT

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ABSTRACT

Introduction: The dynamic development of various techniques, devices, materials and instruments in the field of endodontics over the last few years has enabled relatively predictable treatment results, even in cases initially seemed unsolvable by conservative endodontic procedures.

The Aim: The aim of this case report is to demonstrate the success of conservative endodontic treatment of previously inadequately treated upper permanent incisors with extensive periapical lesions and complete healing of the periapical tissues.

Case presentation: A 25-year-old man, A.Š, came to the dental office because of impaired aesthetics in the area of upper central and lateral incisors.

After the intraoral examination, inadequate composite veneers were recorded on teeth 11, 12, 21, and 22. On the 3D CBCT image, inadequate endodontic treatments were observed in all four upper front teeth with large periapical lesions. 5.8 x 6.86 mm.

During the first visit, due to damaged aesthetics, the teeth were prepared, and temporary crowns were made. At the next visit, revision of inadequate endodontic treatment started using endodontic ultrasonic attachments (NSK, Japan), headström files from #30 to #15, and a rotary retreatment instrument (size 30/05; D-Perfect RE TREATY, China). Calcium hydroxide was used as an intracanal medication (Calxyl, Germany) for 15 days.

After 15 days, definitive obturation was performed in all four teeth using a bio-ceramic sealer (Fill Root, Italy) with modified warm lateral condensation of gutta-percha (Fast Pack Pro, China).

On the follow-up radiographs after 6 months, bone healing was recorded, and on the follow-up CBCT scan taken after 1.5-year, complete restitution of the lesions was observed.

Conclusion: A nonsurgical approach to inadequate endodontic treatment is the first choice of therapy and is preferred whenever possible because it ensures better prognosis and is less invasive.

Keywords: revision, endodontic retreatment, periapical lesion, rotary endodontics, bio-ceramic sealer