

# Congress: “Current Practice in Croatian Pediatric Dentistry – 2022”

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## Lecture abstracts

### ORCA/EFCD CONSENSUS ON “HOW TO INTERVENE IN THE CARIES PROCESS IN CHILDREN?”

Christian H. Splieth\*

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This presentation explains the recommendations for dentists for the treatment of dental caries in children, with an emphasis on early childhood caries (ECC), primary teeth, and occlusal surfaces in permanent teeth. The consensus was achieved by an expert panel nominated by the European Organization for Caries Research (ORCA) and European Federation of Conservative Dentistry (EFCD) boards. It was based on 3 systematic reviews and a non-systematic literature search. The main findings were that the more polarized disease distribution in children and adolescents along social gradients should be taken into account when managing the caries process at all levels, such as the individual, the group, or a population. The control or reduction of caries activity is the basis for successful caries management, with adequate daily oral hygiene and fluoride application via toothpaste, ensured by caregivers, as primary goal. Non-invasive interventions such as fluoride varnish or silver diamine fluoride are also suitable to arrest or control initial or even cavitated dentine caries lesions in the absence of irreversible pulpitis. In primary molars, preformed metal crowns are more successful than multisurface fillings, especially in caries-active patients. Thus, some of our old beliefs have been replaced by new approaches, sometimes on very high levels of evidence and they should be applied in general practice. Key words: Caries; Children; Prevention; Therapy; Inactivation

### “PEDIATRIC DENTISTRY 4.0: BACK TO THE FUTURE “

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*Preventive & Pediatric Dentistry, University of Greifswald, Germany*

Pediatric dentistry is an established field which covers almost all aspects of dentistry in children. This is mainly determined by the epidemiologic basis where a great success story was achieved. In spite of a caries decline, mostly in the permanent dentition, the primary dentition exhibits high treatment need. Unfortunately, a polarization in a low number of children, often without sufficient coping skills is seen. Apart from this, diagnostics and early treatment of malocclusion and malfunction, hard tissue disorders such as MIH and dental trauma will possibly be the most demanding tasks for future pediatric dentists. Thus, the presentation will highlight: Prevention of early childhood caries; Management of caries in primary teeth; New techniques without „caries removal “; Increasing cooperation via nitrous oxide sedation; MIH - the new epidemia?; Trauma: biological and forensic thinking.

Key words: Silver-Diamine-Fluoride; Stainless Steel Crowns; Nitrous Oxide; Sedation

### TOOTH INJURY - NEW SOLUTIONS FOR OLD TEMPTATIONS

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In the lecture would be presented a detailed protocol for the treatment of a patient who has suffered dental trauma from emergency admission to the planning of long-term treatment that will fulfil the patient, but also the wishes of the dentist from a functional and aesthetic point of view. The first step should always be appropriate emergency treatment

after the injury, from the first contact with the traumatized patient until the finish of the first visit. Taking medical history from patients (child) or from adult accompanying with child, is an extremely important factor in assessing the psychophysical status of a traumatized patient. An element that certainly needs to be consider when we treat a child is the aspect of physical trauma in terms of abuse or neglect. Clinical examination, X-ray diagnostics and pulp vitality testing precede the clinical diagnosis, after which the patient can be optimally treated, as emergency management on the traumatized tooth is of utmost importance for the further treatment and long-term prognosis. A definitive treatment plan is more certain after reviewing what has been achieved so far and it should be consider potential collaboration with other specialist branches (prosthetics, orthodontics). The lecture will also cover topics on splinting and stabilization of injured teeth, as well as restoring crown fractures with adhesives and composite materials, with all endodontic aspects of traumatized young permanent tooth, as well as possibilities in prevention of dental injuries.

Keywords: Tooth injury; Emergency care; Restorative procedures; Follow-up

### REMINERALIZATION OF THE INITIAL CARIOUS LESION - POSSIBILITIES AND LIMITATIONS

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The new concept of caries as an ecological imbalance in the oral biofilm has led to a change in the approach to the treatment of caries lesions. The focus of restorative dental medicine is directed towards the conservative approach, of which the remineralization of the most desirable and optimal ways of regenerating the lost tooth structure is repeated. Currently, the preservation of dental hard tissues, by mean of minimally invasive restorative treatments, takes precedence over their elimination. In the treatment of teeth with asymptomatic vital pulps and carious lesions involving, radiographically, the inner pulpal third of dentin (deep carious lesion), the main objective should be to avoid pulp exposure, allowing tooth retention for long-term, and avoiding potentially painful, costly, and invasive endodontic treatments. The various remineralization materials and technologies currently used to remineralize enamel and dentine will be presented. The effect of bioactive glass on enamel remineralization will be explained. First, only fluoride is used for remineralization. Today, biomimetic remineralization materials that have the ability to form crystalline apatite are successfully used. Hydroxyapatite particles in oral hygiene environments reduce bacterial attachment on the surface of the enamel in situ without undesirable side effects, such as changes in colour. Further research in this area will definitely provide a new product that will achieve optimal results.

Keywords: Enamel; Dentin; Tooth remineralization

### ORAL MANIFESTATIONS OF SYSTEMIC DISEASE

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Introduction. The connection between the health of the oral cavity and general health is well known, because oral diseases can impair general health, but the health of the oral cavity can also be impaired due to the existence of a systemic disease. The structures of the oral cavity can be affected directly by the disease or indirectly due to the influence of drugs

or due to the patient's behavior. Oral manifestations affect hard dental tissues, supporting tissues and oral mucosa. The changes that occur can lead to pain and discomfort, cause concern for the child and parents, and can be completely asymptomatic. Doctors of dental medicine are often the first to suspect the presence of a disease during a routine examination, because the area of the oral cavity is easily accessible for early detection of pathological changes. That way, they can directly influence the course and therapy of the systemic disease by early recognition and referring the patient to further tests. Aim of the lecture is to present oral manifestations of gastrointestinal diseases, diabetes, blood diseases, bacterial diseases and viral diseases with a special focus on COVID-19.

Key words: Oral manifestation; Systemic disease; Dentistry

#### NEW IADT GUIDELINES FOR THE TREATMENT OF DENTAL TRAUMA IN CHILDREN

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Traumatic dental injuries (TDIs) occur frequently in children and young adults, comprising 5% of all injuries. Twenty-five percent of all school children experience dental trauma and 33% of adults have experienced trauma to the permanent dentition, with the majority of the injuries occurring before age 19. Luxation injuries are the most common TDIs in the primary dentition, whereas crown fractures are more commonly reported for the permanent teeth. Proper diagnosis, treatment planning and follow-up are important to assure a favorable outcome. The vast majority of dental traumas affect children and teenagers, and the loss of teeth leaves them with lifelong consequences. The treatment of younger age groups may be different than the treatment of adults, mainly due to the incomplete development of teeth and facial growth during puberty. As with previous guidelines, the working group included experienced investigators and clinicians from various dental specialties and general practice. The current revision represents the best evidence based on the available literature and expert professional judgment. In cases where the data did not appear conclusive, recommendations are based on the consensus opinion of the working group, followed by review by the members of the IADT Board of Directors. The aim of this lecture is to inform about the new IADT recommendations and in this way to improve the treatment of injured teeth and reduce the number of complications caused by dental trauma.

Keywords: Trauma; IADT; Guidelines

#### PROBIOTIC PRODUCTS IN CARIES PREVENTION

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Use of probiotic products in medicine has become very effective in the prevention and treatment of many diseases, mostly intestinal and urogenital. Live micro-organisms, usually part of the normal flora, are administered in adequate amounts that confer a health benefit on the host. The general principle of bacteriotherapy or replacement therapy is to change the local micro-ecology, and compete with pathogenic bacteria, influence on mucosa permeability and restitution of gut micro-ecology and influence on inflammation process. Since the oral cavity is also part of the gastrointestinal system, the same mechanisms of action of probiotic bacteria can be adopted for caries prevention. In the oral cavity direct and indirect actions of probiotics can be observed: they directly influence binding of bacteria to proteins and other bacteria, influence bacterial metabolism and produce substances that inhibit cariogenic bacteria. Indirect actions are the same as in other parts of the intestinal system. Most microorganisms that are considered to be probiotic are: *Lactobacillus* spp. and *Bifidobacterium* spp. There are many others and genetical engineering is strongly involved in the fabrication of new species. *Lactobacillus rhamnosus* is today one of the most popular bacterial species that is used as probiotic.

Key words: Probiotic bacteria; Cariogenic bacteria; Probiotic yoghurt

#### TEETH EXTRACTIONS IN CHILDREN - TO EXTRACT OR NOT TO EXTRACT, THAT'S THE QUESTION!

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Children are the most demanding and honest patients, therefore dental medicine in children's age is quite different from dental medicine for adults. The biggest challenge in work with children is their cooperation during dental medical treatment, which can be significantly impaired by fear. If the procedure includes anaesthesia, which in most cases requires the application of an injection, children are the most demanding patients, therefore dental medicine in children's age is quite different from dental medicine for adults. The biggest challenge in work with children is their cooperation during dental medical treatment,

which can be significantly impaired by fear. If the procedure includes anaesthesia, which in most cases requires the application of an injection, it can have a very traumatic and negative effect on the child's behavior in the office. For this reason, we are often in doubt whether to extract a tooth (whether it is a primary tooth or a permanent tooth) or leave it in the oral cavity. The doubt is further strengthened by the fact that children are in the period of growth and development, so the situation in the mouth is constantly changing. Access to children during tooth extractions must be completely adapted to each child and his pace of acceptance of the procedure. This lecture is designed to point out the different and most common problems when it comes to tooth extraction in children of different ages. This can serve as a foundation for successful comprehensive dental health care in a primary care dental practice.

Key words: Children; Teeth; Extraction

#### BEHAVIOR GUIDANCE METHODS IN PEDIATRIC DENTISTRY

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Behavior guidance is a process from basic to advanced techniques, using non-pharmacological and pharmacological options. Behavior guidance is a continuous interaction involving the dentist and his team (nurses, assistants...), the patient and the parent, and is directed towards communication and education. The goal of Behavior guidance is to ease fear and anxiety, and it promotes understanding of the need for good oral health and the process by which it is achieved. A dentist treating children should have a variety of Behavior guidance approaches and, in most cases, should be able to determine the child's exact developmental level, dental procedures and temperament, and predict the child's reactions to treatment. The behavior of the dentist and his assistants play an important role in controlling the behavior of the pedodontic patient. Through communication, the dental team can alleviate fear and anxiety, teach appropriate coping mechanisms, and guide the child to be cooperative, relaxed, and confident in the dental environment.

Key words: Behavior guidance; Pediatric dentistry; Anxiety

#### Poster presentations

##### THE MOST COMMON PATHOLOGICAL CHANGES OF THE ORAL MUCOSA IN CHILDREN AND ADOLESCENTS TREATED IN THE CLINIC FOR ORAL MEDICINE AT THE UNIVERSITY HOSPITAL OF SPLIT

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Objective: To examine the most frequent pathological changes of the oral mucosa in children and adolescents. Materials and methods: Anamnestic data (N=37) on gender, age, as well as any other diseases and medications, were collected retrospectively. Also, data from clinical examination records were collected. Results: The majority of respondents were female (72.97%). The most common diagnosis was geographic tongue (32.43%). The majority of respondents (74.28%) had changes of a chronic nature, and the most common (35.14%) was mucosal exfoliation. The most common localization of pathological changes was the tongue (35.14%). Among the symptoms, burning was the most common symptom (24.32%). Less than half of the respondents (45.95%) needed treatment, which in that case was mainly limited to local therapy (27.03%). Conclusion: The most common change in the oral mucosa is the geographic tongue and, accordingly, the most common lesion is exfoliation of the mucosa, the most common localization being the tongue. Most of the respondents had subjective symptoms in the oral cavity, and the most common was burning.

Key words: Geographic tongue; Oral diseases in children; Mucosal exfoliation; Local therapy.

##### PATHOLOGICAL CHANGES ON ORAL MUCOSA IN PREGNANT WOMEN

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Objectives: The aims of this study were to investigate is there a difference in the incidence of oral mucosal changes in pregnant women compared to non – pregnant women of reproductive age. Materials and Methods: Patient medical data was collected from the subjects (N = 48, 24 pregnant women and 24 non – pregnant women of reproductive age)

on whether they smoke, whether they have chronic disease and subjective symptoms in the oral cavity and then clinical examination, sialometry and pH value of saliva were measured. Results: The results confirmed a statistically significant difference in saliva secreted during 5 minutes ( $P < 0.0001$ ) and pH values ( $P < 0.0001$ ) between pregnant and non-pregnant subjects, in the frequency of symptoms in the oral cavity ( $P = 0.012$ ), mouth dryness ( $P = 0.028$ ) and number of diagnoses ( $P < 0.0001$ ). Conclusion: Pregnant subjects have lower salivary flow and lower pH value compared to non-pregnant women of reproductive age, there was an increase in the frequency of symptoms in the oral cavity, dryness of the oral cavity and the frequency of pathological changes in the oral mucosa compared to time before pregnancy.

Keywords: Pregnancy; Oral disease; Changes on oral mucosa; Pregnant women

#### INTERDISCIPLINARY COOPERATION OF ORTHODONTICS AND CHILDRENS DENTISTRY IN THE TREATMENT OF HYPODONTIA: CORONOPLASTY

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Introduction: Hypodontia is a congenital lack of one or more teeth in the deciduous, permanent or both dentitions. Upper lateral incisors and other lower premolars are most often missing. Hypodontia of the lateral maxillary incisors is a condition that significantly impairs the aesthetics of the smile, which is especially worrying in young patients. This article demonstrates how a combination of non-invasive treatments and immediate restorative options can improve clinical outcomes after orthodontic treatment of symmetric upper lateral incisor hypodontia. Objective: To establish aesthetic oral rehabilitation of an 18-year-old girl with hypodontia of the upper lateral incisors with a multidisciplinary approach of a pediatric dentist and orthodontist. Case report: The patient came to the Department of Pediatric and Preventive Dentistry after completing fixed orthodontic therapy that closed the space caused by hypodontia of the upper lateral incisors. The next step was coronoplasty of teeth 13 and 23. A satisfactory aesthetic and functional result was achieved by reshaping the crowns of teeth 13 and 23 with composite material (GrandioSO Heavy Flow liquid and GrandioSO solid A3 composite) to morphologically imitate the crowns of teeth 12 and 22. Conclusion: With a multidisciplinary approach in the treatment of hypodontia, it is possible to achieve a satisfactory aesthetic and functional result for the patient. Although other types of therapy are available today, such as implantology and prosthetics, we can conclude that coronoplasty is a simpler, faster and more economical choice. Although from time to time there is a need to remove accumulated pigmentation or even replace the material, the advantage over dental bridges is that the biological integrity of the teeth remains preserved.

Keywords: Hypodontia; Coronoplasty; Composite material

#### MASTICATORY EFFICIENCY IN CHILDREN WITH AND WITHOUT DIAGNOSED DEEP CARIOUS LESIONS

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Background: Deep carious lesions have a detrimental effect on the structural integrity of the tooth and can cause pain in response to mechanical stimuli during mastication. For this reason, it is expected that caries reduces masticatory function. This study aimed to compare masticatory efficiency between children with and without diagnosed deep carious lesions. Participants and methods: The study included 48 participants (24 male, 24 female) aged from 3 to 14 years. Participants were divided into two groups; the first group included 24 children with healthy dentition, and 24 children paired by age and gender with bilateral deep carious lesions (ICDAS 4, 5 or 6) were included in the second group. Image program (NIH, LOCI, University of Wisconsin, USA) was used for the particle size analysis; particles were obtained by chewing a standardized silicone bolus sample through 20 masticatory cycles. Results: There is a significant difference in chewed particle diameter ( $2.330 \pm 0.754$  mm vs.  $5.072 \pm 3.009$  mm,  $p=0.0001$ , Mann-Whitney test) and surface ( $5.855 \pm 4.041$  mm<sup>2</sup> vs.  $23.675 \pm 19.483$  mm<sup>2</sup>,  $p=0.00005$ , Mann-Whitney test) between the two groups. Moreover, the mean chewed particle diameter of children with healthy dentition is smaller than the masticatory normative index (MNI = 4 mm) which indicates adequate mastication while children with diagnosed bilateral deep carious lesions have a mean particle diameter greater than MNI and thus have inadequate mastication. Conclusions: Children with diagnosed bilateral deep carious lesions have a decreased

masticatory efficiency in comparison to children with healthy dentition, which confirms the necessary need for caries treatment in all teeth despite the dentition.

Keywords: Dental Caries; Mastication; Particle size

#### RESIN INFILTRATION AS AN AESTHETIC SOLUTION FOR A PATIENT WITH ENAMEL HYPOMINERALIZATION CAUSED BY DENTAL FLUOROSIS

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Introduction: Developmental enamel defects inevitably impair the aesthetics of the teeth and can subsequently have a negative effect on patient's self-confidence. During enamel formation, the leading cause for the development of dental fluorosis is excessive fluoride ingestion. Dental fluorosis is characterized as enamel hypomineralization which, due to the presence of porosity, refracts light differently compared to sound enamel. Clinically, it's presented with mottled opacities, varying from white to yellowish. Several treatment options can be performed in this case, one of which is, in fact, invasive. Low-viscosity resin infiltration has shown to be a successful treatment option for white enamel lesions, mild to moderate fluorosis, and other hypomineralization lesions. Case report: In this clinical case, the patient expressed dissatisfaction with the aesthetics of the upper frontal teeth. A non-invasive low-viscosity resin infiltration technique (Icon®, DMG, Hamburg, Germany) was performed on a patient diagnosed with mild dental fluorosis (according to Dean), who had recently completed his fixed orthodontic therapy. Based on the "Tooth surface index of fluorosis" (TSIF), 4 etching cycles with Icon-Etch (15% hydrochloric acid) were determined in order to remove the lesions. Resin infiltration was performed in accordance with the manufacturer's instructions. With regard to the fluorosis index, 4 etching cycles were performed, after which the acid was rinsed thoroughly, furthermore the tooth was dried, and lastly the Icon-Dry (99% ethanol) solvent was applied. The surface of the teeth was observed in order to determine whether anticipated colour transformation had occurred. Furthermore, the resin Icon-Infiltrant (TEGDMA based resin matrix) was infiltrated. All lesions were completely removed in one visit. After 6 months, a follow-up consultation with the patient was scheduled, and the results demonstrated complete colour stability and definite patient satisfaction. Conclusion: In milder forms of dental fluorosis, surface infiltration of hypomineralized enamel with low-viscosity resin may be the only non-invasive therapeutic choice for complete removal of the lesion.

Keywords: Dental fluorosis; Minimally invasive; White spot lesion; Resin infiltration

#### INFLUENCE OF CYTOSTATIC DRUGS ON ROOT GROWTH AND DEVELOPMENT – CASE REPORT

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Cytostatic drugs belong to the group of antitumor drugs used to treat malignant diseases. Their effect is indiscriminate. They not only destroy malignant cells in the body, but also have negative effects on healthy cells that divide rapidly (progenitor or stem cells). Case report: A fourteen-year-old male patient comes to the dental clinic of Zagreb Clinical Hospital Center for follow-up examination. His medical history revealed acute lymphoblastic leukaemia in 2017. Review of medical records revealed treatment with chemotherapy and allogeneic peripheral hematopoietic stem cell transplantation from an unrelated donor. Ongoing therapy was also denied. A control radiograph was obtained showing atypical appearance of the roots of the permanent canines, premolars and second molars in both jaws. The crowns of these teeth are fully developed and of adequate size, while the roots are shortened in relation to the time of therapy and the stage of growth and development of the individual tooth. The shortened length of the developed roots indicates the influence of cytostatic drugs on the cells of the Hertwig's epithelial sheath in the growth and development stage. Conclusion: The use of cytostatic drugs during the growth and development phase of teeth may cause the appearance of various dental anomalies. The effect on the cells of Hertwig's epithelial sheath leads to shortening of the tooth root, so it is necessary to carry out preventive measures to prevent premature loss of permanent teeth. Key words: Cytostatic; Odontogenesis; Root development



**TEACHERS ALSO PROMOTE HEALTH**

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**Introduction:** Teacher Education students at the University of Zagreb believe they are not properly educated about health, therefore they are not able to pass that knowledge on to children. Because of that, students' educators designed the preventive project "Teachers also promote health" within the program of the Student Union of the University of Zagreb called Healthy University. The project has been designed and is being executed by students of Dental Medicine, Medicine, Nutrition and Psychology. **Objective:** The task of the educators is to teach future teachers so they can acquire knowledge which is beneficial to their personal health and which can be used in their future work with their pupils, and to be able to react properly in specific health-related situations. **Methods:** Teaching is conducted as a cycle of peer education consisting of three workshops on physical and oral health and nutrition; sexual health and mental health. The importance of preserving and improving oral health is emphasized in the first workshop. Dentistry students teach about tooth structure and primary and permanent dentition, with an emphasis on the preservation of primary teeth until the eruption of permanent teeth; and about the aetiology and clinical picture of carious lesions. The presentation of the DMFT index and comparison with other European countries shows how vexatious the state of oral health of children in the Republic of Croatia is and points out the necessity of cooperation of all experts who work with children in order to improve the current situation. The interactive workshop demonstrates the correct brushing technique on models, as well as the use of dental floss and interdental brush. Additionally, it is explained how to react in an emergency situation of dental trauma, according to the procedure "First aid for an injured tooth". At the end of the education, students receive brochures that highlight the most important topics as well as suggest methods of oral health knowledge transfer. **Results:** The evaluation that was conducted at the end of this cycle shows that teacher education students are extremely satisfied with the knowledge they have acquired in this education. **Conclusion:** Given how successful the project has proven to be, the educational cycles will continue in their current form, but will also be improved in terms of adaptation to the specific needs of individual components of the University of Zagreb that run teacher education programs. **Keywords:** Oral health; Prevention; Education

\*This project was awarded the Rector's Award for contribution to the academic and wider community for academic year 2021/2022

\*\*Portal Srednja.hr declared this project one of the three most successful student projects in academic year 2021/2022

\*\*\*This project was reviewed by experts in the mentioned fields

**OCCURANCE OF POSTOPERATIVE PAIN AND ITS INTENSITY AFTER DENTAL TREATMENT UNDER GENERAL ANESTHESIA**

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**Introduction:** Dental caries is one of the most common health problems in children. In certain cases, tooth restoration is performed under general anesthesia. The aim of this research is to determine the frequency of postoperative pain after dental treatment under general anesthesia, and its intensity. **Materials and methods:** The respondents are children (73) who, in the period from April 2021 to April 2022, underwent dental treatment under general anesthesia at KBC Rijeka. The average age of the child is 6.7±2.95. The existence of pain and its intensity were monitored one hour after the procedure and contact by telephone with the parents 1, 3, 7 and 14 days after the procedure. Pain intensity was determined using the Wang-Baker (WB) pain scale. The scale is composed of pictures of six faces, each of which represents a patient with no pain, mild pain, moderate pain, severe

pain, very severe pain, and the worst pain. The scale has numbers from 0 to 10 that the parent/guardian uses to rate the pain based on the face the child has chosen. **Results:** One hour after the procedure, pain appears in 11% (8) of cases. According to the WB pain scale, the result is 0.46±1.51. One day after the procedure, pain appears in 49% (36) of cases. The result of the WB pain scale is 1.51±1.82. Three days after the procedure, pain appeared in 21% (15) of cases, and the result on the WB scale was 0.52±1.16. Seven days after the procedure, pain appears in 7% (5) of cases, and the result on the WB scale is 0.22±0.85. Fourteen days after the procedure, pain appears in 3% (2) of cases, and the pain intensity on the WB scale is 0.14±0.96. **Conclusion:** According to this research, the incidence of pain is the highest one day after the procedure and according to the WB pain scale, the pain is of lower intensity.

**Keywords:** Dental care; Postoperative pain; General anesthesia

**AUTOGENOUS MOLAR TRANSPLANTATION: A CASE REPORT**

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**Objective:** To demonstrate the success of autotransplantation as a surgical method for preserving function and aesthetics in patients who are not candidates for implant or prosthetic treatment due to skeletal growth and development of the jaw and soft tissues.

**Subjects and methods:** A 16-year-old girl was referred to the Department of Oral Surgery, Clinical Hospital Dubrava for extraction of tooth 36. Orthopantomogram analysis revealed a chronic periapical and intraradicular inflammatory process on tooth 36 and a completely impacted tooth 38 with more than two-thirds of root development. The autotransplantation was suggested to the patient. The procedure included extraction of tooth 36, removal of granulation tissue and preparation of the recipient socket, atraumatic alveotomy of tooth 38, repositioning of the donor tooth into the newly created alveolus at position 36, and stabilisation with a flexible splint (wire composite) for 12 weeks. Antibiotic therapy was prescribed for 7 days, and the patient received the usual postoperative instructions after tooth extraction. Sutures were removed 10 days after surgery and the patient was followed up at 1, 2, 3, and 6 months. **Results:** During the monitoring period, the transplanted tooth showed no clinical symptoms. After 3 months, the apposition of the newly formed bone was visible on the orthopantomogram. **Conclusion:** The procedure of molar autotransplantation has proven to be a viable solution for restoring physiologic occlusion, aesthetics, and masticatory function, and is therefore considered a valuable alternative for the treatment of missing teeth.

**Keywords:** Autotransplantation; Tooth loss; Impacted molar