

**МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ  
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»**



## **МАТЕРІАЛИ**

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Конференція внесена до Реєстру заходів безперервного професійного розвитку,  
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according to Black, the presence of cement fillings significantly changes the localization and area of the contact points of the chewing teeth, in some cases completely excluding the tooth from occlusion.

**The aim of the study.** To analyze the changes that occur after the destruction of the tooth crown by caries, restoration with restorative materials and propose an algorithm for complex treatment in comorbidity.

**Materials and research methods.** An analysis was made of the contacts of the teeth of the masticatory group with restorations from cement and composite materials on the occlusal surface by means of the index of destruction of the occlusal surface according to Milicevic. In addition, the following were evaluated: marginal fit, surface structure of seals, localization and closure areas.

**Results.** When analyzing the contacts of the teeth of the chewing group with restorations on the occlusal surface, the following results were obtained. The total number of composite restorations on posterior teeth was more than the number of cement fillings by about 40%. Composite fillings replaced hard tissue defects of various sizes, from Black class I defects with IRRI = 0.2 to significant class II restorations in MOD and IRRI = 0.8–1.0 cavities. The marginal fit of composite fillings was an order of magnitude higher than the marginal fit of cement fillings. The surface structure of the fillings was much better with composites. In the presence of composite restorations placed on the teeth of the masticatory group in the cavities of the first class according to Black, the occlusal contacts did not differ significantly from the intact teeth because they were placed on the intact slopes of the cusps. In cases where composite restorations replaced tubercles on the occlusal surface of the posterior teeth, the contact points lost their characteristic area and localization. The localization of the occlusion sites also depended on the size and type of the cavity, the presence of preserved tooth cusps, the quality of the restoration, and the statute of limitations for its implementation. As a result of treatment with this method, we present a clinical case. Two microimplants were installed in the patient for orthodontic preparation - vestibular between the roots of the 25th and 26th teeth and on the palatal side between the 26th and 27th teeth, a spring rod was set up for the intrusion of the 26th tooth. As the maxillary molar moved and occlusal separation appeared, «Relyx ARC» photopolymer composite material was layered on tooth 36 to restore the height of the clinical crown. Within four months, a sufficient volume of intrusion of the 26 teeth was achieved. As the final stage of treatment after the removal of orthodontic attachments and the removal of microimplants, a metal-ceramic crown was made for the 36th tooth.

**Conclusions.** With significant destruction of the tooth crown as a result of a carious process and dentoalveolar elongation of the antagonist tooth, when the restoration is not possible at once, we offer a combined method of treatment. The effectiveness of the combined method of treatment has been proven in the long-term observation period by normalizing the interocclusal distance and restoring the odontoglyphics of the posterior group of teeth.

**Belikova N.I.**

## **LONG-TERM RESULTS OF ADHESIVE SPLINTING OF MOBILE TEETH IN THE LOWER HUMAN FRONTAL SECTION. ERRORS AND COMPLICATIONS**

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**Introduction.** At the initial stage of using splinting structures based on the reinforcing-adhesive technique, many researchers pay attention to the main fundamental errors: unreasonable extension of indications for splinting of teeth, when teeth with a third degree of mobility are included in the splint, non-compliance with the biomechanical laws of splinting, when the doctor relies only on the strength of the connection splint with teeth. Therefore, the well-known classical methods of splinting have significant drawbacks associated with the rigid fastening of the teeth, as a result, the possibility of minimal, but physiologically necessary tooth mobility is excluded.

**The aim of the study.** To assess the long-term results of splinting using non-invasive and invasive adhesive splints in patients with pathological mobility of the anterior teeth.

**Material and research methods.** 73 patients were examined with the presence in the oral cavity of 75 structures of adhesive splints of the frontal part of the dentition previously made using

different methods. Splinting of teeth in these patients was carried out in dental clinics of Chernivtsi, Kherson and Kharkov regions during 2016-2021. Among the splinting structures, 24 (32.0%) splints were made using a non-invasive splinting technique, 51 (68.0%) - using an invasive one. When examining these splint designs, the violation of the marginal fit of the adhesive splint or its detachment from the surface of the splinted teeth was assessed. The marginal fit of the splint. was assessed visually, using a dental probe, caries indicators and a diagnostic light guide of a LuxDent photopolymerization lamp with a green light spectrum.

**Results.** When examining previously manufactured adhesive splints placed on the oral side of the anterior teeth, a number of shortcomings and complications of splinting were found in 81.2% of patients. Analyzing the results, we can state that six (8.0%) patients had splint cracks, 20 (26.66%) had defects in the interdental spaces, four (5.33%) had chipped parts of the teeth, and 28 (37.33%) - chips of the filling material, in 12 (16.0%) - separation of individual teeth from the general structure, in 54 (72.0%) - violation of the marginal fit of the splint. The period of use of structures that had such defects ranged from six months to 1.5 years after splinting. When examining and analyzing these splinting structures, it was found that the following errors were most common: in 54 (72.0%) cases of violation of the marginal fit of the splint, in 48 (63.9%) - rocks of composite material sections and defects in the interdental spaces. In addition, when using adhesive splints, 40 (53.33%) patients complained of an aesthetic defect, speech impairment. During their examination, in 18 (24.0%) cases, a fairly wide intermediate part was observed. In the manufacture of fiberglass or polyethylene splint, only one or two layers of reinforcing tape 0.1 mm thick were used, which forced much more composite material to be applied. All this led to a violation of the natural contours of the teeth to be splinted and made it difficult for patients to speak. The distance from the adhesive splint to the gingival margin was minimal in 23 (30.6%) patients, and was absent in 15 (20.0%) patients. This led to the appearance of retention points in the interdental spaces and in 49 (65.33%) patients, it made it difficult to carry out hygiene measures, as a result of which plaque quickly accumulated and tartar formed. In 46 (61.33%) patients, the teeth were displaced vestibularly, due to a decrease in the area of contact of the tape with the teeth during the adaptation of the adhesive splint to the interdental spaces.

**Conclusions.** Thus, in the analysis of adhesive splinting structures, with a period of use of up to one year, most often, the main disadvantages and complications were violations of the marginal fit of adhesive splints, aesthetic problems, speech impairment, and deterioration in oral hygiene. In patients who underwent adhesive splinting for one year or more, poor oral hygiene, vestibular tooth displacement, and a violation of the marginal fit of the splint were noted in the first place.

**Bernik N.V.**

## **THE RESULTS OF THE STUDY OF DEVELOPMENTAL MECHANISMS OF INFECTIOUS-INFLAMMATORY COMPLICATIONS IN THE ORAL CAVITY AFTER ORAL SURGERY**

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**Introduction.** The disorders of quantitative and qualitative microscopic flora content, that is, microbe biotic community of the oral cavity and colonization with pathogenic microorganisms, cause inhibition of the body immune reactivity, promote the occurrence of infectious-inflammatory complications and become one of the important reasons for their development.

**The aim of the study** of the research is to study the mechanisms of development of infectious-inflammatory complications in the oral cavity after oral surgery in order to improve their treatment and prevention.

**Materials and methods.** 81 patients, aged from 20 to 65, were examined. They were prepared for out-patient surgery in the oral cavity and distributed into three groups according to the types of surgery performed: the 1<sup>st</sup> group included 27 patients waiting for dental implants, the 2<sup>nd</sup> group — 28 patients with retention and dystopia of the third lower molar, the 3<sup>rd</sup> group — 26