МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

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Конференція внесена до Реєстру заходів безперервного професійного розвитку, які проводитимуться у 2023 році №5500074

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including 32 patients received traditional treatment. The first signs of formation of the primary bone callus were assessed on X-ray.

Conclusion. Introducing platelet-rich plasma into the line of fracture was found to speed up reparation of the osseous tissue, prevent occurrence of late post-traumatic complications, improve the results of treatment, and speed up the rehabilitation terms for patients.

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INDICATOR OF MICROCRYSTALLIZATION OF SALIVA IN 7-12 YEARS OLD CHILDREN

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Introduction. Studying the mineralizing properties of the oral fluid is important, since the mineralizing ability of the oral fluid affects the condition of the hard tissues of the teeth, that is, the acid resistance of the enamel, the decrease of which leads to demineralization with further progression of the carious process.

The aim of the study is to study indicators of mineralizing potential in children aged 7-12 with caries of temporary and permanent teeth and compare with indicators of children with intact teeth.

Materials and methods. We examined 223 children aged 7-12 from the city of Poltava. In each child, the condition of the hard tissues of the teeth was determined and the DMFT, dft index was calculated. The mineralizing potential of saliva was assessed by its microcrystallization. Evaluation of microcrystallization was carried out according to H.M. Saifulina, O.R. Pozdeev in average scores depending on the types of crystal formation. Assessment of the mineralizing potential of saliva: 0.0-1.0 – very low; 1.1-2.0 – low; 2.1-3.0 – satisfactory; 3.1-4.0 – high and 4.-5.0 – very high.

Results. Regardless of whether children have caries in temporary or permanent teeth, the microcrystallization index is always better in children without caries, which indicates higher mineralizing properties of the oral fluid of children with intact teeth. The results obtained are presented in Table.

Age of children in years	Microcrystallization index (points)			p
	Average indicator	In children with intact teeth	In children with caries (DMFT+dft)	
7-9 (I) n=134	2,16±0,06 n=134	2,97±0,09 n=39	1,83±0,04 n=95	<0,001
10 n=24	2,11±0,11	2,93±0,12 n=5	1,90±0,07 n=19	<0,001
11 n=25	1,97±0,09	2,53±0,17 n=5	1,83±0,07 n=20	<0,001
p_{10-11}	>0,05	>0,05	>0,05	
12 n=40	2,0±0,08	2,81±0,13 n=7	1,84±0,06 n=33	<0,001
p_{10-12}	>0,05	>0,05	>0,05	
p_{11-12}	>0,05	>0,05	>0,05	
10-12(II) n=89	2,03±0,05	2,77±0,08 n=17	1,85±0,04 n=72	<0,001
p_{I-II}	>0,05	>0,05	>0,05	
Of all examinees n=223	2,11±0,04	2,91±0,07 n=56	1,84±0,03 n=167	<0,001

Notes. 1. p10-11... – probability of difference in indicators of different age groups; 2. pI-II – the probability of the difference in indicators of children 7-9 and 10-12 years old; 3. p – is the probability of indicators of children with caries and without caries at each age.

Children with caries of temporary teeth had a microcrystallization index of 1.82±0.04 points against 2.79±0.07 points in children with intact teeth, and with caries of permanent teeth -1.69±0.06 points and 2.33 ±0.06 points respectively.

Conclusions. Therefore, the course of caries of both temporary and permanent teeth in 7-12 years old children occurs against the background of microcrystallization of saliva. The caries rate of temporary and permanent teeth has inverse correlations with microcrystallization index of the saliva.

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VERTICAL AUGMENTATION METHOD OF THE MANDIBLE DISTAL PORTIONS

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Introduction. Technique of segmental osteotomy (bone-submaxillary flap) is based on the principles similar to those of distraction. Nevertheless, contrary to distraction the osteotomic segment with maintained trophic is given a required height during operation. The main requirement is at least 4 mm of the bone over the vascular-nervous bundle.

The aim of study. Considering substantial previous work and fundamental scientific research of foreign colleagues, it is difficult to introduce authentic technique, but an important task is to improve, optimize and introduce into clinical practice of surgical dentists.

Material and methods. In addition to improvement of transplant aid, to introduce into clinical practice effective and mini-invasive methods of eliminating complicated dental-alveolar pathology and complicated atrophy that restrict or make it impossible to install dental implants.

Results. Advantages of the technique: single surgery; simultaneous possibility to enlarge the volume in height and width changing the preparation angle of the osteotomic segment; suturing the wound without additional immobilization; possibility to perform without bone-plastic compositions (the risk of alveolar process formation in the form of a sand clock). Disadvantages: unlike classical distraction, limitation of growth in height is up to 5-6 mm; the risk of perforation of the lingual flap, which requires interruption of surgery; impossibility to be applied at the early post-extraction period; technical difficulties in case of marked oblique line of the tongue.

Operation technique: under local anesthesia, the mucous membrane is cut 4-6 mm lower the visible level of the attached gums from the premolars to the retromolar space. Isolation of the mental vascular-nervous bundle is necessary in order to prevent its injury. Osteotomy of the fragment is performed retreating 2 mm from the existing teeth and 2 mm from the mandible canal. The fragment is mostly saddle-shaped, but other shapes are not excluded. The most important condition is maximum gentle osteotomy without perforation of the lingual part of the flap. In case perforation happens, surgery must be stopped. The fragment cannot be moved in any case, and the wound must be sutured. Repeated surgery is possible in 8 weeks. When osteotomy is successful, a bone fragment is separated from the donor part by means of a convenient method (with an elevator, chisel etc.) and lifted on a required level (6 mm maximum). The fragment is fixed by means of titanium plates and screws; space between the fragments is filled with any bone-plastic material. Fixation is possible with auto- or xenoblocks, but in our opinion, this variant is rather risky considering expected resorption. Wound suturing does not require additional immobilization. It is made according to the common surgical principles.

Conclusions. During 2012-2022 we performed 37 surgeries. In all the cases we used small blocks of auto-bone taken from the mandible angle for the primary fixation of the osteotomic fragment in the wound. It was followed by additional fixation with titanium plates. To our minds, primary block fixation made it easier to drill trepanation holes of an elevated fragment for the fixation of the titanium plate with a screw. No bone-plastic material was used. All the 37 clinical cases healed with primary tension. The height was restored to the given level in 35 patients. 70% regeneration was registered in 2 cases only. We think a cause was incomplete adaptation of a titanium plate resulting in injury of the soft tissues and chronic inflammation. In future, we are planning to apply segment osteotomy both for the distal mandible portions, and other clinical cases.