

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



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Конференція внесена до Реєстру заходів безперервного професійного розвитку,
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microorganisms, the presence of untreated teeth, a poor immune system, etc. Among the great variety of such factors, the presence of concomitant somatic pathology in patients plays one of the leading roles in the formation of pathologies of periodontal tissues.

The aim of the study of the study was to evaluate the effectiveness of our suggested scheme of treatment of periodontal tissues in patients with pathology of the urinary system comparing to a traditional scheme.

Materials and methods. The study involved 72 patients with pathologies of the urinary system: glomerulonephritis, pyelonephritis and urolithiasis. They were divided into 2 groups: basic and comparison. The first group received our treatment, which consisted of professional hygiene and subsequent application of a combination of ointments of Thiotriazoline and Zinc Oxide, and rinsing with 0.05% solution of Chlorhexidine bigluconate for 5 days. The traditional treatment consisted of professional oral hygiene and rinsing with 0.05% chlorhexidine bigluconate solution twice a day for 5 days. Patients before and after treatment were examined and indexed. In patients with a complex of antioxidant drugs, the results were better than in patients who underwent traditional treatment of periodontal tissues.

Results. Periodontal tissue pathology is one of the predominant groups of diseases of the oral cavity, so the problem of their treatment or prevention is quite relevant. Periodontal diseases in patients with pathology of the urinary system to date are studied insufficiently. There are not enough studies about the causes, features of the course, treatment and prevention of periodontal pathologies in this group of patients. Therefore, the development of new or improvement of existing treatment regimens in patients with diseases of the urinary system is of considerable interest to both scientists and practitioners.

Conclusions. Our results showed that our suggested scheme of treatment of periodontal tissues in patients with pathologies of the urinary system is more effective than traditional treatment. This was proved by statistical data: the indexes of the main group were better than those of the group of comparison.

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INFLUENCE OF DRINKING WATER QUALITY ON THE DENTAL HEALTH OF CHILDREN LIVING IN BUKOVYNA REGION

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Introduction. Nowadays interest on the problems of regulating the mineral composition of drinking water and predicting their impact on the health of the population is increasing all over the world. According to the Ministry of Health, more than 80 % of human diseases are related to the quality of drinking water. It is known that the human body receives macro- and microelements with drinking water, such as calcium about 10–20 %, magnesium 5–15 %, sodium about 10 %, potassium, iodine, fluorine, iodine, copper, zinc, selenium, nickel etc.

Bukovyna is located within the boundaries of the Carpathians, Precarpathia and the Pokutsko-Bessarabian Highlands. The river network of the region belongs to the basins of the main rivers Prut and Siret, as well as small watercourses of the Dniester basin. According to this indicator, Bukovyna stands out significantly among others in Ukraine, therefore the study of regional peculiarities of drinking water supply and clarification of the role of the water factor in the formation of dental morbidity is relevant.

The aim of the study was to assess the quality of drinking water in different regions of Bukovyna and to determine its impact on children's dental health.

Materials and methods. We examined 900 children aged 7, 12 and 15 living in Bukovina region. Caries incidence was assessed by prevalence and intensity indicators. Chemical and analytical studies of water samples were carried out on the basis of SSU "Ukrainian Scientific Center of Marine Ecology".

Results. The obtained data about main dental diseases indicate significant differences in the prevalence of carious lesions of temporary and permanent teeth in children of the mountainous and

plain regions of Bukovyna. The highest rates of caries of both primary and permanent teeth were found in children who were born and permanently live in the mountains and foothills, basins of Cheremosh, Siret and Suceava rivers. The indicators of caries incidence in children who live permanently in the flat area, basins of the Prut and Dniester rivers turned out to be more favorable. Because of the conducted research, basin differences of the studied compounds within the limits of the Chernivtsi region were established. Drinking water contains insufficient amounts of calcium, iodine, manganese and sodium. Analysis of water supply sources for fluoride content in all regions of Bukovyna was also carried out. According to the received data, we can trace the ultra-low content of fluoride in the water of the water supply sources. As for pollution indicators, the waters are classified as "slightly polluted". Drinking water corresponds to class I in terms of salt content and pH level, as well as class III - in terms of the group of biogenic compounds.

Conclusions. Thus, the results of the research indicate the presence of regional differences in the mineral composition of drinking water, the inferiority of micro- and macroelement supply of water resources of the region, and the high prevalence of dental caries in children.

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TREATMENT OF MANDIBLE FRACTURES WITH PLATELET-RICH PLASMA

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Introduction. Platelet-rich plasma applied in surgical dentistry can be prepared from a comparatively small amount of patient's blood (40-50 ml) taken either before or during surgery, using a centrifuge machine and simplified separation methods under sterile conditions keeping to the aseptic rules directly before its use.

The aim of study. To improve the effect of treatment and speed up rehabilitation terms of individuals with mandible fractures by means of introducing platelet-rich plasma as an autogenous source of growth factors into the line of fracture.

Material and methods. The processes of bone reparation in the place of mandible fracture in patients were assessed by means of the common clinical and radiological examinations.

Results. The blood was taken from the peripheral vein in the amount 20-40 ml by means of standard sets for blood sampling: disposable sterile catheters and vacuum tubes with anticoagulant. The first centrifugation was performed during 10 minutes at the speed of 1000 rotations per minute (95g). The whole blood separated into the two layers: the lower layer formed by erythrocytes, and the top straw-colored layer formed by plasma and the rest of formed blood elements. After the first centrifugation the tubes were placed into the tripod with the same number of tubes without anticoagulant. The straw-colored layer was absorbed by means of a 65 mm needle and syringe, and the fluid was poured into clean tubes without anticoagulant. Plasma was taken carefully till the layer formed by erythrocytes, and all the manipulations were very cautious not to injure platelets. After that, tubes with plasma were centrifuged for the second time during 10 minutes at the speed of 1500 rotations per minute. After the second stage of centrifugation the content of the tube was the following: the top layer consists of platelet-poor plasma containing fibrinogen and platelets in a very small amount, and the lower one looking like a red circle on the bottom, that is, platelets in high concentration. The syringe with 65 mm needle was inserted into the tube utmost in order to take platelet-poor plasma, till the moment air penetrates into the syringe. About 1ml of plasma with platelets remain in the tube. By means of another needle, 75 mm long, which is enough to reach the bottom of the tube, platelet-rich plasma was collected. The platelet-rich plasma obtained contains platelets in the concentration five times as much as the initial one. High concentration is not sufficient to find bone reparation properties of platelet-rich plasma. After all the stages of centrifugation, platelets must not be damaged in order to perform their artificial activation by means of calcium-thrombin complex before their use. CaCl₂ was added into the tube with thrombin to make solution, and mixed with platelet-rich plasma in the ratio 1:10. Patients with mandible fracture were divided into two groups. The main group including 37 individuals received treatment with additional administration of platelet-rich plasma into the line of fracture. The control group