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# Abstract book

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after surgical stage of treatment recession significantly increased up to 3.0±0.02mm, in one year indicators significantly improved and remained stable at 2.54±0.09mm . PI Index (A.L. Russel) in patients from Group 2 prior to treatment was 3.81±0.19, 6 month after surgical stage of treatment, during control examination, the index significantly decreased to 2.24±0.18 ($p < 0.05$), and at one year remained almost unchanged (2.3±0.19) ($p > 0.05$). In Group 1 patients prior to treatment this indicator was at 4.22±0.06, 6 month after treatment it also significantly decreased to 2.06±0.17 and at one year it remained at the same level (1.98±0.15) ($p > 0.05$).

**Conclusions:** The results of our own observations have shown that the developed method of surgical treatment of generalized periodontitis with the use of Er: YAG (erbium with wavelength of 2940 nm) and Nd: YAG (neodymium with wavelength of 1064 nm) was effective.

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## SPARING TECHNIQUE OF SURGICAL TREATMENT OF PATIENTS WITH AMELOBLASTOMAS OF THE JAWS

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**Introduction.** The face is a complex of several anatomical structures, each of which performs one or more functions, is an essential element that characterizes a person as a complex anatomical organ. Odontogenic tumor of epithelial origin, such as ameloblastoma, remain common form of bone tumors of maxillofacial area, leading to aesthetic and functional disorders. According to the literature - odontogenic tumors, cysts and tumor-like neoplasms amount to 51% of all benign neoplasms of the jaws (Gutan A.E and authors, 1990, Volkov V.A, 1990, Latvians S.V, 1992, Malanchuk V.A. 2010). Thus the aggressive nature of the flow ameloblasts raises the question of the degree of radical surgery.

**Aim.** Determine the optimal, individualized approach to treatment selection for patients with ameloblastomas.

Individually justify the degree of radical surgery with maximum preservation modern criteria of function and aesthetics standards.

**Materials and methods.** 9 clinical cases have been analyzed with ameloblastomas . All patients were treated at the department of oral and maxillofacial surgery in 2012-2015. All patients were underwent clinical, laboratory and radiologic investigations, 3D CT. In 7 clinical cases determined the presence of foci of bone destruction separated by osseous partitions in the area of the alveolar process, in some cases, destruction of articular and coronal process, branch and angle of the mandible without breach of continuity of the posterior border of the mandible with deformity and penetration into the soft tissues were detected. In these cases we held conserving surgery: «Cystectomy according Grigorchuk technique", drug therapy, rehabilitation uneventful. We used chemical method, which consists in the treatment of postoperative cavity walls with a concentrated solution of phenol and its neutralization by solution of alcohol to cause aseptic necrosis of epithelial elements of capsule of ameloblastoma. By the developed and proposed this sparing technique in 77 % we abled to avoid the most radical method of treatment of this pathology

– resection of the lower jaw. In 23 % (2 patients) we had a radical surgery – subtotal resection part of lower jaw according to clinical, laboratory investigations, 3D CT.

**Results**. There are big variety of methods, the main condition of which is the radical removal of the tumor followed by autologous or allograft, which used in case of radical surgery. However, sparing technique of Y.F Grigorchuk for over 30 years, remains effective, saving function and aesthetics standards, avoid disability of patients with this disease. Given the diversity of the proposed surgical treatment of ameloblastomas, the question of their optimization and individualization remains relevant at the present time.

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## ENDEMIC FLUOROSIS IN CONDITIONS OF CHUGUIV DISTRICT'S KHARKIV REGION

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**Introduction.** Currently more than 260 million people of over the world use potable water with the fluorides concentration more than 1mg/dm³. When evaluating health of the population along with anthropogenic factors the influence of natural environmental factors has great importance. The main source of fluoride (fluoride combinations) for the man is potable water that means that the concentration of fluoride-ion in the potable water is the factor, determining the incoming level of fluoride in the organism. Besides water, fluoride incomes in the man's organism with food.

**The aim** of this work is the research of fluorosis' prevalence among the number of pupils of the settlements Chuguiv district and concentration of the ionization fluoride in the water sources.

**Materials and methods.** Chuguiv district is situated in the central part of Kharkiv region, in the valley of river Seversky Donets. The climate is moderate-continental, arid. The relief is flat, intersected by ravines and hollows. The district was found in 1923.

The potable waters are hard, contain a lot of iron. In certain settlements high concentration of nitrates (Korobochkino) and sulfates (Stara Gnilica) are observed. Water desalination (floods in the early spring) may slightly reduce the concentration of micro-and macroelements, including fluoride; affects for the pH value. Trihalomethanes are very rare, but still be observed, being dangerous carcinogens. Quantitative determination of fluoride in the water was performed by the photometric method. The concentration was determined by the chart, giving optical density, the performance of fotoelektrokalorimetry KFK-3. Water intake was conducted in the secondary schools in village Mospanovo and urban-type settlements Chkalovsky and Eskhar. The severity of destruction was determined by using the classification of V. K. Patrikeev and WHO. Besides fluorosis, was diagnosed caries.

**Results.** Hydrogeochemical characteristic of the natural water in village Mospanovo has the main role in the development of severe destructive fluorosis' forms of primary and permanent teeth (IFT – 2,98). Among the pupils of Escharovska school I-III levels the incidence of fluorosis was 56% (with the concentration of fluorides 1,36 mg/dm³). Visible cariesresistence is observed. Defluorination is expensive, but the most reliable method of the index reducing of dental fluorosis among the local population, where the replacement of the water source is not possible.

**Conclusion.** The degree of damage by fluorosis depends on the individual sensitivity of the organism, the presence of hereditary diseases, mainly the digestive tract. It doesn't subordinate to customary mathematical calculations.