CURRENT ASPECTS OF ODONTOGENIC JAW CYSTS TREATMENT
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Introduction: In the structure of benign neoplasms of the maxillofacial area, the number of patients with odontogenic cysts does not have any tendency to decrease. According to the recent literature, the incidence of periapical granuloma varies between 9.3 and 87.1%, and development of radicular cysts ranges from 6 to 55% [6].

It should be mentioned that among operations performed by maxillofacial surgeons in outpatient settings, surgical intervention for presence of jaw cysts takes second place after tooth extraction [4]. Traditional methods of cystectomy involve mandatory resection of the root apex when the bone wound healing occurs under the blood clot [1-3,7].

The difference in approaches to conducting such an operation is determined by the material used to fill in the cyst cavity. To improve osteogenic regeneration, the use materials with osteoinduction and osteointegration properties is growing [5]. But even with the perfect preliminary endodontic treatment, regression of the pathological cells, which greatly increases the indications for resection of the root apex, is not uncommon.

Therefore, one of the topical problems of modern dentistry is the search for the most effective means and methods for treating the bone cavity and tooth root during the stage of cystectomy under the conditions of maintaining its length.

The purpose of the work was to improve the method of cystectomy, which preserves the length of the tooth root, effects bone repair and minimizes the allergic action of the drugs used during and after the surgery.

Materials and Methods. We examined and operated 15 patients aged 30-56 years with radicular cysts of the alveolar process of the upper or lower jaw, who were divided into 2 groups: controls (C) - 7 persons and main group (MG) - 8 persons. Before the operation all patients underwent the necessary clinical and radiological examination. In C, the operation was carried out using the traditional method, with administration of a complex antibiotic therapy.
MG patients underwent the root canal filling in the causative tooth (teeth) with a self-curing paste under local anesthesia followed by serpentine or trapezoidal incision in the projection of the root, separation of the mucoperiosteal flap, trepanation of the cortical plate (in the presence of its defect, the bone defect was expanded to the required sizes), cystectomy. The cyst bed was treated with a 36% solution of polycresulenic acid for 1 - 2 minutes, washed with a physiological solution. The bone cavity and root apex were treated by ultrasound using a ball-shaped diamond bur through a 0,05% solution of chlorhexidine bigluconate for 5 minutes with ultrasonic apparatus UDS-L LED ULTRASONIC SKALER, an E9 handpiece with 3 - 20 W intensity and 28 ± 3 kHz frequency in the operating mode of 40-second action, 20-second pause. The bed of cyst (cystogranuloma) was filled with the gum “Stimul OSS” (solution of collagen, chlorhexidine, hydroxylapatite), the mucoperiosteal flap was put in place, the wound was sutured tightly by catgut. In the postoperative period, resorption of Septefril 0,2 mg was administered 6 times a day for 4 - 7 days; Brustan 1 tablet for 7 - 8 hours, was administered as an analgesic agent when necessary.

**Results** In the postoperative period, MG patients did not have any complaints, the body temperature was 37,2 ± 0,3 °C, only 2 of them took analgesics once. Objectively, on day 2-3 in MG patients, swelling was moderate, palpation of the region of the intervention projection was painless, the suture was complete, the mucosa in the area of intervention did not demonstrated any pathology.

The controls complained of an increased body temperature on the day of the intervention to 37,6 ± 1,6 °C, and the pain intensity required pain relief 2 - 4 times per day in all patients. Objectively, on day 2 - 3, swelling of some tissues was expressed, palpation of the area of the intervention projection was painful, the suture was complete, the mucosa in the area of the intervention was hyperemic, edematous. On day 4 - 5 in the controls the edema was moderate, palpation of the area of the intervention projection was painless, the suture was complete, the mucosa in the area of the intervention was without pathology.

Thus, MG patients on day 3 - 4 after the surgical intervention fully received food, resumed their work activities. In C only on day 7 the patients could lead a normal life.

Follow-up 3 months later consisted of computer tomography of the
intervention segment. The bone defect boundaries were determined in C patients, within which the bone tissue of the spongy structure with areas of heterogeneity was seen. In MG the bone tissue area had with a less distinct pattern compared with the surrounding tissue of the alveolar process, while there was no clear distinction between the structures, that is, it was not possible to determine the location of the operated radicular cyst.

**Conclusion** Thus, the proposed method of cystotomy allows to improve the efficacy of the treatment of odontogenic cysts and cystogranulomas and to maintain functional value of the tooth due to preservation of the length of the root and accelerate the wound healing process by ensuring complete osteointegration and angioosteogenesis of the implanted material, which is a promising aspect in the process of the subsequent orthopedic treatment and preservation of the physiological status of the dentofacial system.

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