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36 Victoria Road London N59 7LB

APPLICATION OF COLLAPAN-LM FOR LIMITED JAW BONE DEFECTS AFTER CYSTECTOMY OPERATION.

D.D. IBRAGIMOV,

U.B., GAFFAROV,

U.KH. SIROZHIDDINOV,

Samarkand State Medical University

Abstract. An urgent task of surgical dentistry and maxillofacial surgery is to fill defects in the bone tissue of the jaws that occur after operations, extraction of teeth, and removal of radicular cysts of the jaws. Bone defects after operations on the jaws make it difficult to adequate prosthetics and cause a violation of the speech, masticatory function, and aesthetics of the face. The article explains the use of Kollapan-LM for limited jaw bone defects after cystectomy. The object of the study was the analysis of the results of 23 patients with radicular cysts of the teeth of the upper and lower jaws. For patients with radicular cysts after cystectomy, resection of the apex of the teeth with cystectomy filled the cavity with osteoregenerator preparation Kollapan-LM. Regeneration of bone tissue defects after operations with cystectomy and with resection of the apex of the tooth with the use of bone stimulator Kollapan-LM with lincomycin and metronidazole after surgery helps to reduce the contamination of the microflora of the oral cavity, the intensity of the aerobic microflora inoculation in the wound is significantly reduced, cells of the regenerative and phagocytic type (fibrocytes) are detected, fibroblasts and macrophages). there is a more rapid construction of mature bone.

Keywords: cystectomy, radicular cyst, osteoregeneration, Kollapan-LM.

Relevance: To eliminate bone defects in the jaws, an autoosteograft is traditionally used, taken from the chin or branches of the lower jaw, the tubercle of the upper jaw, and the bones of the brain skull (Robustova T.G., Ivanov S.Yu.). However, taking the bone auto material requires an additional operation. It is all the more inappropriate to fill limited jaw defects with grafts from the iliac crest, tibia, fibula, and radius, which are used in reconstructive operations in cancer patients,

post-traumatic deformities, and congenital defects of the facial skull (Babusch Ch., 2009).

In connection with the foregoing, the use of synthetic bone for jaw plastics is of great relevance.

Currently, an urgent problem requiring further development is the increase in osteogenesis using a bone growth stimulator and artificial bone in the plastic of limited bone defects after surgery, cystectomy, which was the goal of this study.

Purpose of the study. The aim of this study is to replace bone defects in the jaws after cystectomy with osteogenesis stimulator Kollapan-LM (lincomycin, metronidazole) and a collagen membrane.

Material and research methods. The object of the study was the analysis of the results of 23 patients with radicular cysts of the teeth of the upper and lower jaws at the clinical base of the Department of Maxillofacial Surgery of the Samarkand State Medical University in the Department of Maxillofacial Surgery of the Central City Hospital of the city of Samarkand for 2022.

All patients were divided into two groups: patients with traditional treatment (11 people, 47.8%), in which patients with complications of chronic periodontitis complex treatment was carried out by the traditional method; and patients with the recommended complex treatment (12 people, 52.2%), in which patients with radicular cysts after cystectomy resection of the apex of the teeth with cystectomy filled the cavity of the agent stimulating reparative osteogenesis in bone defects using a biocomposite material consisting of lincomycin - metronidazole Collapan-LM, platelet-rich blood plasma (OPPK), collagen membrane, to prevent atrophy of the contour of the alveolar ridge and restore the structural integrity of bone defects, increase the osteogenic potential of bone tissue.

Patient groups were divided by age. The age of patients ranged from 21 to 50 years and older.

In total, 23 patients with radicular cysts were treated, of which 11 (47.8%) used traditional methods of treatment, and in 12 (52.2%) patients with radicular cysts after

cystectomy, resection of the apex of the teeth with cystectomy was filled The cavity of the agent stimulating reparative osteogenesis in bone defects used a biocomposite material consisting of lincomycin - metronidazole Kollapan-LM, platelet-rich plasma (P.P.P.K.), collagen membrane, to prevent atrophy of the contour of the alveolar ridge and restore structural integrity bone defects, increasing the osteogenic potential of bone tissue.

Clinical studies were carried out according to the standard scheme and included a survey of patients, collection of an anamnesis of the disease, an anamnesis of life, physical methods of research (examination, palpation, percussion), and instrumental, additional research methods (laboratory, microbiological, radiological).

The results obtained and their discussion: In the first group of 11 patients, 9 patients had a smooth postoperative period, wound healing by primary intention, and the sutures were removed on the 10-12th day. In two patients, suture divergence was observed on the 5th-6th day, a mattress suture was applied, and blockades were performed with an anesthetic (3 blocks). In one patient, suppuration of the surgical wound was observed, followed by the formation of a fistula. This was due to a violation of the regimen in the postoperative period with severe hypothermia. The patient was taken under control for further treatment tactics.

Patients in the second group after cystectomy surgery and with resection of the tooth apex, the resulting defect was washed with a 3% hydrogen peroxide solution, 0.12% chlorhexidine solution, the cyst cavity was filled with granules of an osteoregenerator preparation, Kollapan-LM granules with platelet-rich blood plasma (O.T. PK), collagen membranes were closed over the wound, the mucoperiosteal flap was put in place and fixed with interrupted sutures made of polyamide thread.

Of the 12 patients in 11 patients, the postoperative period was uneventful, the wound healing by primary intention, and the sutures were removed on the 10-12th day. In contrast to the control group of patients, only one patient had a divergence of the sutures on the 6th day; the patient had a mattress suture, and blockades with an anesthetic were performed (3 blockades). The sutures were removed on the 11th day.

In patients with the recommended treatment, in contrast to the control group of patients, an increase in regional lymph nodes was observed in one patient after a month of surgery due to diseases of the ENT organs, in one patient after a month a slightly painful percussion of the resected tooth appeared due to inflammation of the gums of the maxillary region. Patients were prescribed appropriate treatment according to complaints of which subsequent recovery was observed.

In the patients examined in both groups, after 3 months, an x-ray examination was performed, and a comparative analysis was carried out.

Conclusion: 1. in patients with periradicular cysts of the teeth of the upper and lower jaws, odontogenic inflammatory processes reduce the regenerative capacity of the jaw bone, which requires stimulation of osteogenesis.

2. Regeneration of bone tissue defects after operations with cystectomy and with resection of the apex of the tooth when using a biocomposite material consisting of lincomycin - metronidazole Kollapan-LM, platelet-rich blood plasma (P.P.K.), collagen membrane after surgery contributes a decrease in the contamination of the microflora of the oral cavity, the intensity significantly decreases, the seeding of aerobic microflora in the wound reveals cells of the regenerative and phagocytic type (fibrocytes, fibroblasts, and macrophages). There is a more rapid construction of mature bone.

3. The use of Kollapan-LM with the inclusion of the osteotropic antibiotic lincomycin reduces the postoperative inflammatory reaction and reduces pain.

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