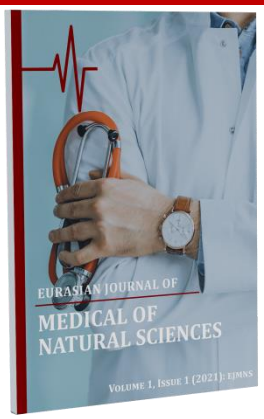
EURASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES
Innovative Academy Research Support Center
UIF = 8.3 | SJIF = 5.995 www.in-academy.uz



DETERMINING THE EFFECTIVENESS OF THE TREATMENT METHOD IN PATIENTS WITH ODONTOGENIC SINUSITIS

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https://www.doi.org/10.5281/zenodo.10141324

ARTICLE INFO

Received: 07t November 2023
Accepted: 15thNovember 2023
Online: 16th November 2023

KEY WORDS

Odontogenic sinusitis, low-intensity laser therapy, endoscopic surgery, sinusitis.

ABSTRACT

The article presents the development of diagnostic and treatment tactics for patients with odontogenic sinusitis, complicated by incorrect endodontic treatment of teeth in the upper jaw, as well as the use of low-intensity laser therapy.

Relevance. The relevance of the problem of treating chronic forms of rhinosinusitis is due not only to the frequency of this pathology, the severity of the course, the possibility of developing orbital and intracranial complications, and unfavorable outcomes.

The development of frequently recurrent forms of the disease, which, in some cases, become protracted and chronic, but also the fact that the means and methods of treating this inflammatory process developed and used in practice are not always effective.

One of the most common causes of odontogenic sinusitis is the entry of filling material into the maxillary sinus during endodontic treatment of premolars and molars of the upper jaw. Endoscopic diagnosis and minimally invasive treatment of such complications have not yet been sufficiently developed.

According to various authors, patients with odontogenic sinusitis, when filling material is removed into the maxillary sinus, account for 7-22% of the total number of patients with chronic maxillary sinusitis.

The inflammatory process that occurs in the maxillary sinus, the mechanical impact of various foreign bodies, the toxic and immunological effects inherent in most filling materials, lead to qualitative changes in the sinus mucosa. A number of authors point out bacterial flora as the main etiological factor in the development of odontogenic sinusitis, and consider the action of aggressive microflora and the difficulty of diagnosis to be the reason for the increased incidence of chronic forms of sinusitis.

Today, the main method of treating chronic odontogenic sinusitis remains surgical, the purpose of which is to eliminate the source of infection in combination with radical surgery on the maxillary sinus, regardless of the duration of the disease. Despite the constant introduction into practice of new "gentle" methods of surgical treatment, the use of endoscopic surgery methods, it is not always possible to achieve a complete cure for the

patient. The resource for preventing odontogenic sinusitis is not fully used. In addition, there is practically no data on the nature and frequency of complications at different times, especially the development of long-term postoperative complications.

The purpose of the work is to develop diagnostic and treatment tactics for patients with odontogenic sinusitis, complicated by incorrect endodontic treatment of teeth in the upper jaw.

Materials and methods. We observed 22 patients with odontogenic sinusitis caused by the removal of filling material into the periapical tissues of premolars and molars of the upper jaw with its entry into the maxillary sinus. The patients were treated as inpatients at the «SaoMed» medical center in the period 2020-2023. There were 69 men (45,4%), women - 83 (54,6%). The age of the patients ranged from 18 to 55 years.

All patients underwent standard general clinical examinations, as well as orthopantomography, multislice computed tomography of the nose and paranasal sinuses, and endoscopic rhinoscopy. The main group consisted of 76 patients (50.0%) who underwent endoscopic maxillary sinusotomy (anthrotomy), in addition, 20 (13.1%) had expansion of the ethmoidal cells, and 11 (7.3%) of these patients underwent correction of intranasal structures. The control group consisted of 45 (29.6%) patients who underwent traditional maxillary sinusotomy. The “root” teeth, which were not previously removed, were removed during the main intervention together with the maxillofacial surgeons. The pathological tissues obtained during the operation were sent for histological examination. Clinical, radiological and functional indicators were used as criteria for assessing the results of treatment of patients in the main and control groups.

The results obtained and their discussion. Multislice computed tomography reliably showed the location and size of the filling material, the location of the material removal, the “root cause” tooth, the condition of the bone walls of the maxillary sinus and periapical tissues, and pathological changes in the maxillary sinus. The orthopantomogram reflected the process in general terms. We preliminarily sanitized all patients of the main group for 7-8 days: the sinuses were washed once a day through an extended natural cavity with antiseptic solutions and endonasal low-intensity laser therapy was used. During surgery, in 82 (54%) patients (63 main and 19 control groups), a mycetoma was discovered in the sinuses, the core of which was the filling material. In 10 (46%) patients (13 in the main and 26 in the control groups), in the lower parts of the maxillary sinus there was a sharply edematous, polyposis-altered mucous membrane, cysts of various sizes. In the postoperative period, patients in the main group had slight serous-hemorrhagic discharge and moderately severe nasal breathing disturbance. The wound healed by primary intention by the 5-6th day after surgery. Patients in the control group who underwent surgery on the maxillary sinus, performed using the traditional method, suffered from swelling of the tissues of the infraorbital region, pain in the operation area, copious serous-hemorrhagic discharge from the nose, and difficulty in nasal breathing. The period of incapacity for work in patients in the main group was 5-6 days, in patients in the control group - 9-11 days.

Conclusions. Thus, it is advisable to treat patients with odontogenic sinusitis complicated by endodontic manipulations through the joint efforts of an otolaryngologist and an oral and maxillofacial surgeon.

The use of a minimally invasive surgical endoscopic method and the use of low-intensity laser therapy can reduce the length of stay of patients in the hospital and significantly reduce the level of complications.

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