

Clinical Observation of Chronic Sphenoiditis With Moderate Cognitive Impairment

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Abstracts

Sphenoiditis inflammation of the main sinus. the clinical picture of which is very variable, in the vast majority of cases, it consists of a non-localized headache radiating to the occipital, parietal region or orbit. Secretions flowing into the nasopharynx form the clinical picture of postnasal drip with an unproductive cough. With isolated forms of sphenoiditis, nasal breathing, as a rule, is not disturbed. The disease can form alone or in combination with other sinusitis (polysinusitis, pansinusitis) [1,2].

Clinical Example

Patient P, 21 years old, went to an ENT doctor without clearly formulated complaints from the ENT organs. The reason for the appeal was the results of magnetic resonance imaging (MRI) of the brain and paranasal sinuses (SNP), performed as prescribed by a psychiatrist, in whom the patient had been undergoing a course of specialized therapy for depressive syndrome for a long time. The otorhinolaryngologist revealed that the patient had had periodic episodes of difficulty in nasal breathing over the past 2 months, more on the right, headaches and nasal discharge of a mucous nature. The patient was not treated in connection with the above complaints. According to the conclusion of a psychiatrist, the patient was diagnosed with an anxiety-depressive disorder characterized by panic attacks, neuroso-neurotic symptoms, combined with the presence of itching in various parts of the body. Specialized therapy in a psychiatric clinic was carried out for a year, but without the presence of positive dynamics, despite the rather large volume of drugs received by the patient (Figure 1).

Endoscopy of the nasal cavity revealed a moderate swelling of the mucous membrane in the region of the upper nasal passage without pathological secretion in the nasal cavity. X-ray examination (Figure 1) revealed fluid content in the right and left sphenoid sinuses with a level (A - coronal projection) and damage to the posterior cells of the ethmoid labyrinth on the left (B - axial projection). Given the clinical picture of the course of chronic sphenoiditis in this patient, testing of neurocognitive functions was included in additional criteria for evaluating the effectiveness of the chosen tactics [3]. Among other things, the severity of sinonasal symptoms was assessed using the SNOT-22 questionnaire, which allows assessing the quality of life and the results of treatment of patients with diseases of the nose and paranasal sinuses [4]. In the preoperative examination, testing of cognitive functions in the patient revealed 22 points, with a norm of 27 to 30 points, which corresponded to moderate impairments. When testing according to the SNOT-22 questionnaire, 32 points were obtained, which corresponds to a mild manifestation of sinonasal symptoms.

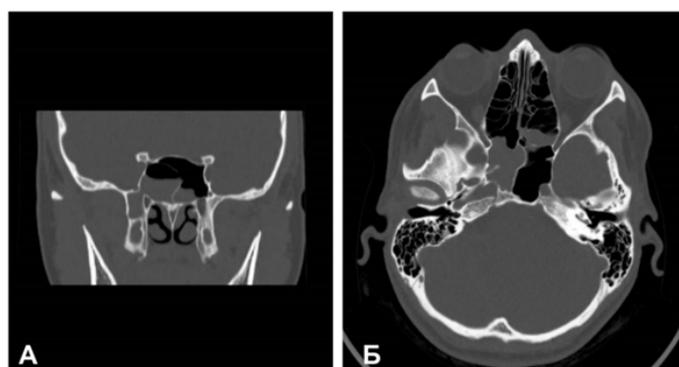


Figure 1: Computed tomography of the paranasal sinuses of patient P. before surgical treatment. A - coronal projection, B - axial projection.

Based on the clinical picture of the disease, the results of CT scan of the SNP, a collegial decision was made on the advisability of surgical treatment. The patient underwent endonasal endoscopic polysinusotomy. In the process of revision in the main sinus under visual control, a neoplasm of a cystic form with mucopurulent contents was opened. The remaining stages of the operation were carried out in the standard volume. The early postoperative period included systemic antibiotic therapy (cefazolin 2.0 g per day for 7 days), endonasal vasoconstrictor drugs. Next, the patient was prescribed endonasal topical glucocorticoids (mometasone furoate) for 1 month.

The results of the control examination by a psychiatrist after 1 month: overall health is satisfactory. During the conversation, the patient significantly noted an improvement in the general

psychosomatic state with a pronounced positive dynamics of depressive symptoms. Taking into account the positive dynamics of the treatment of sinusitis, it was decided to significantly reduce the doses of drugs received by the patient for the treatment of depressive syndrome. Testing of neurocognitive functions allowed us to fix a statistically significant decrease in the score - 12 points ($p \leq 0.05$), which corresponded to mild cognitive impairment.

On the part of the ENT organs, the patient did not present any active complaints at the time of the postoperative examination 1 month later. CT data of the SNP showed that all paranasal sinuses were pneumatized, no signs of an inflammatory process were detected (Figure 2). Testing on the SNOT-22 questionnaire revealed 3 points, which corresponds to the complete absence of sinonasal symptoms (Figure 2).

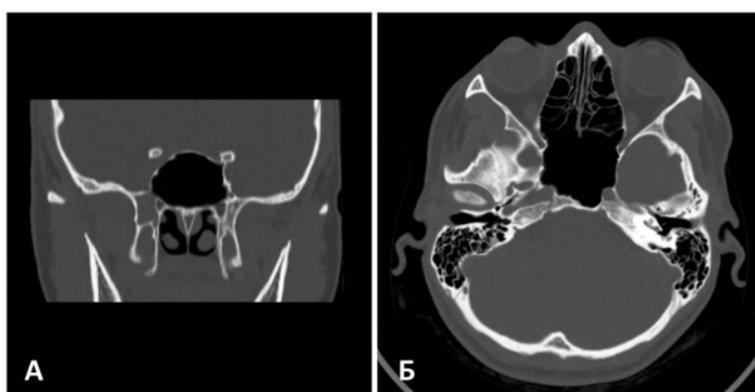


Figure 2: Computed tomography of the paranasal sinuses of patient P. after surgical treatment. A - coronal projection, B - axial projection.

On the part of the ENT organs, the patient did not present any active complaints at the time of the postoperative examination 1 month later. CT data of the SNP showed that all paranasal sinuses were pneumatized, no signs of an inflammatory process were detected (Figure 2). Testing on the SNOT-22 questionnaire revealed 3 points, which corresponds to the complete absence of sinonasal

symptoms. Thus, the topographic-anatomically central location of the sphenoid sinus, in our opinion, gives reason to assume the possible manifestations of certain neurological symptoms. In particular, researchers from the United States drew attention to a similar variant of the clinical picture in sphenoiditis [5], and Russian colleagues did not stand aside [6].

Acknowledgement

None.

Conflict of Interest

No Conflict of interest.

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