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MODERN APPROACHES OF DIAGNOSTICS METHODS OF FRONTITIS

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ABSTRACT: Inflammatory diseases of the paranasal sinuses (PNS) are the most common among the upper respiratory tract pathologies and account for 87% of all visits to an otolaryngologist. In recent years, there has been an increase in this group of diseases, despite new methods of diagnosis and treatment. In the Russian Federation, about 10 million people suffer from acute rhinosinusitis (RS) annually. Among RS, frontal sinusitis occupies a significant place, which can manifest itself in edematous infiltrative or exudative forms and be aggravated by orbital and intracranial complications.

KEYWORDS: Frontal sinusitis, frontal sinus, rhinosinusitis, paranasal sinuses.

INTRODUCTION

Inflammatory pathology of ENT organs accounts for 87% of all visits to an otolaryngologist [1], in the last decade the incidence of paranasal sinusitis (PNS) has increased, and the proportion of hospitalized patients with this pathology increases almost 3-fold annually. The problem of timely diagnosis and treatment of PNS is currently quite relevant [2], despite the emergence of new modern methods of conservative and surgical treatment. According to various authors [3, 4], PNS currently rank first among inflammatory diseases of ENT organs. The paranasal sinuses (PNS) are a single morphological and functional system [5] with similar etiological factors and mechanisms of disease development [6], therefore, when studying the epidemiology of PNS, it is necessary to assess the prevalence of diseases of not only each sinus separately, but also their combined lesions. S. Z. Piskunov and G. Z. Piskunov believe that the ONP are unique anatomical formations that are reserve protective elements of the upper respiratory tract, eye socket and brain [7]. This protective function should be understood in the broadest sense of the word, taking into account the mucociliary system, temperature constancy, aerodynamic patterns and other factors..

The primary focus of the lesion of the middle nasal passage, as a rule, are changes in the anterior and middle cells of the ethmoid sinuses, causing a violation of ventilation and mucociliary cleansing of the maxillary and frontal sinuses. In the anterior sections of the middle nasal passage, the inhaled air changes its direction, which contributes to the deposition of suspended particles

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here, including microbes and allergens, and when any obstacles appear in the area of the ostiomeatal complex, it disrupts all these functions and forms a primary focus of the inflammatory process. A special area is the North Caucasus, which is the most unfavorable in terms of climatic conditions and, due to the formation of secondary immunodeficiency in many residents [8], is characterized by an increased level of exposure to harmful factors of the external urbanized environment on humans, which is also revealed in other industrial zones [9,10]. These factors contribute to an increase in the number of PNS [11, 12]. Of all the ONPs, the inflammatory process most often develops in the frontal sinuses and manifests itself in many patients with severe pain in the area of the eyebrows and, somewhat less often, nasal discharge. Anatomical prerequisites for the formation of frontal sinuses are not only changes in the area of the ostiomeatal complex, but also structural features of the frontal sinuses themselves.

The literature describes a large number of complications after endonasal surgical interventions, including frequent bleeding from vessels of various calibers and locations, liquorrhea, meningitis, intraorbital hematomas, orbital emphysema, and blindness. Rare complications include carotid-cavernous fistula, brain damage, intracranial hemorrhage, pneumatocephalus, brain abscess, malignant hyperthermia, and death due to cardiac arrhythmia caused by general anesthesia.

CONCLUSION

In our opinion, trepanopuncture eliminates various complications of frontal sinusitis and is the gentlest type of surgical intervention on the frontal sinuses in the absence of organic changes in the area of the mouth or in the frontal nasal canal itself.

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