



Sapunkov O.D.

**PECULIARITIES OF THE CLINIC OF CHRONIC PURULENT MAXILLARY SINUSITIS
IN PATIENTS WITH DIABETES MELLITUS**

*Department of Pediatric Surgery and Otolaryngology
Bukovinian State Medical University*

Inflammatory diseases of the paranasal sinuses are one of the topical issues in rhinology. They are found at any age and in a significant part of the population. In Ukraine, the number of ENT hospital patients with diseases of the nose and paranasal sinuses annually increases by 2% and has now reached 62%. The problem of sinusitis is closely related to diseases of the respiratory system, allergization of the body and changes in immunity. Rhinosinusitis is especially difficult in diabetes mellitus (DM). In the literature, there are few data concerning the features of the clinical course of chronic purulent maxillary sinusitis (CPMS) in people with DM, and therefore our aim was to study them.

The clinical course of CPMS was studied in 78 patients with DM and in 20 patients without DM. The patients' age ranged from 19 to 42 years. The severity of DM was defined as moderate. The control group consisted of 20 healthy individuals. All the patients underwent a complex of general clinical studies. They received etiotropic, anti-inflammatory, symptomatic therapy, and insulin therapy.

Patients with CPMS and DM complained of general weakness, increased fatigue, diffuse headache, high body temperature ($38.3 \pm 0.7^\circ\text{C}$), significant nasal obstruction, which did not decrease after the use of vasoconstrictor drops (87%). The discharge from the nose was mucopurulent. With percussion of the paranasal sinuses and palpation of the exit points of the trigeminal nerve, pain was noted in 47% of patients. Anterior rhinoscopy determined congestive hyperemia of the mucous membrane or its cyanotic and whitish color against the ground of swelling of the nasal turbinates (mainly the middle turbinate).

X-ray examination revealed a decrease in the transparency of the maxillary sinuses and in 89% of cases the lesion was bilateral. In 53% of patients, parietal thickening of the sinuses was observed, in 57% - veiled frontal sinuses, in 85% - veiled cells of the ethmoid labyrinth. In the blood of patients, there was an increase in the number of leukocytes against the background of an increase in the relative and absolute number of stab and polymorph neutrophils. A sharp increase in ESR ($37\text{-}45$ mm/h) was recorded in 93% of the surveyed. Complications occurred in 24% of patients (acute tubo-otitis, acute otitis media, acute ethmoiditis, acute frontitis, acute pharyngitis, reactive edema of the eyelids and soft tissues of the cheek). The duration of hospital stay in patients with rhinosinusitis with diabetes mellitus was 11.5 ± 1.5 days.

Clinical manifestation of CPMS in patients without DM is somewhat different. Their general state of health is satisfactory, the temperature is subfebrile ($37.4 \pm 0.2^\circ\text{C}$), the headaches are mild and localized. Rhinoscopy determined hyperemia of the mucous membrane, its moderate edema in the region of the middle turbinate, purulent discharge in the posterior parts of the middle nasal passage. X-ray examination in patients, as a rule, finds an intense decrease in the transparency of the maxillary sinus and the presence of exudate in it. In 49% of patients, sinus lesions were bilateral. Complications are observed in 15% of cases. In the blood, the content of leukocytes and their individual forms (neutrophils, lymphocytes, monocytes, eosinophils) does not undergo significant changes. ESR ranges from $15\text{-}20$ mm/h. The duration of hospital stay is 10.3 ± 1.2 days.

Studies have shown that CPMS in patients with DM is characterized by a long and sluggish course, the involvement of other paranasal sinuses in the process, atypical X-ray image and development of complications. In the blood of these patients, in contrast to patients without DM, there is an increase in the relative and absolute number of stab and polymorph neutrophils, a sharp increase in ESR.

In the future, we are planning a more detailed study of the manifestations of endogenous intoxication and changes in the body's reactivity in patients with chronic purulent maxillary sinusitis with underlying diabetes mellitus.