

IMPROVEMENT OF TREATMENT OF PATIENTS WITH SPHENOIDITIS IN CHILDREN

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ABSTRACT

Over the course of 2017-2021, the results of treatment with bacterial sphenoiditis were studied. The main methods of conservative non-functional treatment of bacterial sphenoiditis were considered, the comparative analysis showed the safety and effectiveness of regional therapy with cefamed against the background of NUD, as well as prematurity before parenteral use of antibacterial drugs. The results of the study showed the effectiveness of regional therapy for 37 patients aged 18 to 50 years diagnosed with sphenoiditis. Observations of the dynamics of the disease showed that 92.1% of patients in the main group and 73% of patients in the control group had a positive treatment effect. Satisfactory treatment effect was noted by 6% of patients in the main group and 27% of the control group, treatment failure was observed in 2% of the control group.

KEYWORDS: *Bacterial Sphenoiditis, Endoscopic Examination Of The Nasal Cavity, Regional Antibacterial Therapy, Low-Frequency Ultrasound (NUZ), Probing, Sinus Evacuation.*

INTRODUCTION

According to epidemiological studies of recent years, from 5% to 15% of the population suffer from acute and chronic sinusitis, and among patients in hospital, about 40% are patients with inflammation of the paranasal sinuses [8]. Sphenoiditis occurs in 27.5% of cases of inflammation of the paranasal sinuses. During forensic medical autopsies, the frequency of their detection is much higher [6].

One of the most complex organs of the human body in terms of anatomical structure is the nose and paranasal sinuses (CNP). The peculiarities of the relationship between the structures of the nose and CNP are determined mainly by the structure of the lattice bone, the size and location of the cavities of which has many options. The lattice labyrinth, extending in the posterior direction, reaches the wedge-shaped bone. Its cells adjacent to the wedge-shaped sinus (CP) are called sphenoidal [4]. The natural mouth of this sinus is high in the upper third of the anterior wall, below the level of the sieve plate of the lattice bone, which complicates the spontaneous outflow of the pathological discharge [3.5]. Inflammatory diseases of the wedge sinus of the nose (CPN), and especially chronic sphenoiditis with multifactorial pathology, in recent years have been accompanied by the development of complications and concomitant pathology of adjacent organs [9]. The location of the wedge-shaped sinuses, the close proximity of vital organs to them

and the above information justify the relevance of the development of new effective, most gentle methods of treatment with an ethio-pathogenetic focus of action. Currently, the treatment of patients with sphenoiditis should be complex and stage-by-stage, contributing to the mobilization of non-specific factors of protection and functional reserves of the body, reducing to the required minimum the medical burden of this category of patients [2.7],

In the periodic press, we did not find any reports of the use of regional antibacterial therapy and low-frequency ultrasound (LF) when localizing its effect on the nasal and major sinuses (OP). Due to the large penetrating capacity of the NUZ (44 kHz), their physiotherapeutic capabilities have been proven in clinical practice, and their use seems appropriate [1.12]. NUZ has a disintegrating effect - it promotes the administration of more drugs to a greater depth, and also has an anti-inflammatory, antibacterial effect and stimulates non-specific resistance of the body, the essence of which is based on improving microcirculation, vascular-epithelial permeability and increasing diffusion of antibiotics in tissues [10, 11].

The aim of our study is to increase the effectiveness of low frequency ultrasound treatment with regional antibacterial therapy in the treatment of inflammatory diseases of the main sinuses.

Research material and methods

In 2017-2021, 37 patients with acute and chronic inflammatory diseases of the wedge sinuses (CP) aged 18 to 50 years were examined and monitored in ENT Department of Clinic No. 1 of Samarkand Medical University. Among the women examined, there were 15 (40.5%) and men 22 (59.5%). 14 of them were diagnosed with acute inflammatory process, 23 - exacerbation of chronic inflammation of CPN. The duration of the disease acute bacterial sphenoiditis (OBS) was from two weeks to three months, chronic up to 10 years. It should be noted that 36.9% of patients had catarrhal sphenoiditis, 63.1% - purulent. All patients were divided into two groups - the main (20 people) and the control group (17 people). Patients underwent a comprehensive clinical examination. At the first stage of the examination, the diagnosis of sphenoiditis was based on a detailed history collection, the duration, the presence of an exacerbation by analyzes of clinical symptoms and the results of anterior and posterior rhinoscopy were taken into account. All patients underwent endoscopic examination of the nasal cavity, morphofunctional, radiological examination methods and computed tomography (CT), and for the purpose of diagnosis and treatment, we used probing and drainage of wedge-shaped sinuses through the natural stomachs using a catheter consisting of a flexible conductor [3]. The presence of drainage makes it possible to carry out bacteriological and functional examination methods, that is, it becomes possible to wash with medicinal substances, introduce them directly into the sinus cavity.

The main group received conservative treatment both in general and in the local effect on the focus of inflammation. In order to exert a local influence on the focus of inflammation, we performed sinus evacuation by non-puncture manipulation after anesthesia with 10% lidocaine spray for topical use, then anemization of the nasal mucosa was carried out by introducing a probe with a cotton tip wetted with 0.1% epinephrine solution and 2% lidocaine solution between the nasal septum and the surface of the middle nasal concha. Before clarifying the nature of microflora and its sensitivity to antibacterial drugs, 5 mL of decasan solution was injected into the sinus against the background of a NUU. A frequency of 44 kHz was used for exposure to NUV. Subsequently, the antibiotic was selected taking into account the sensitivity of

the microflora seeded from the contents of the CPN to it. Essence of this method consists in simultaneous combination of action on structures of paranasal sinuses (OH) of NUZ and medicinal substances. At the same time, drugs were used in dosages that do not inhibit transport function. An antibacterial drug was selected, based on the available information on the spectrum of pathogens, good tolerance, with less side effects.

The cannula was selected depending on the age of the patients and advanced it with neat movements along the nasal septum without resorting to rough pushing, performed rotational actions until there was a feeling of "falling" into the cavity through the natural hole and filling the wedge-shaped sinus through it or the drainage tube with a drug, after which sessions of exposure to a NUV (44 kHz) were conducted transdermal into the main sinus. During the administration of drugs to the CP, most patients felt pain and pressure in the occipital region. When the antibiotic was introduced into the main sinus, a good clinical effect was created in the tissues.

At the same time, parenteral administration of antibiotics was not used. The course of treatment was 3-4 sessions at acute and 5-6 sessions at chronic process. Second-generation antihistamines and multivitamins were also included in the complex treatment. After 3-4 weeks, patients with a chronic inflammatory process underwent a preventive course of NSD therapy, depending on the nature of the change in the mucous membrane of the wedge-shaped sinus. Patients in the control group received conventional conservative treatment according to the standard, parenteral use of an antibacterial drug (cefamed at a dose of 1 g 2 times a day) in combination with sinus evacuation by non-pussy manipulation, physiotherapeutic procedures, daily anemization of the nasal mucosa and oral use of second-generation antihistamines. The criteria for the effectiveness of the therapy were the absence of pathological content in the washing fluid, normalization of the mucous membrane of the nasal cavity and nasopharynx, improvement of pneumatization of the main sinus during X-ray examination. To objectify clinical data, the results of endoscopic examination of the nasal cavity and nasopharynx during functional examination, morphofunctional examination methods (temperature and sensitivity of the mucous membrane of the main sinus) were taken into account. Along with these studies, the patient's length of stay in the hospital was compared, as well as the frequency of performed NSD sessions in the sinus region.

Results and discussion

As a result of combined treatment of patients with acute bacterial disease, both with chronic exudative isolated and combined sphenoiditis, sinus sanation was noted, confirmed radiologically, restoration of physiological parameters of the state of the nasal mucosa, saccharin test was 27 ± 2 . Similar results were noted by a number of other researchers [1,2,10]. We conducted a point assessment, where 1 point indicated no effect, 2 points - satisfactory effect, 3 points - positive effect. After treatment with individuals with acute sphenoiditis, recovery was achieved in 92.1% of patients in the main group and 73% of patients in the control group. The treatment effect was assessed as positive.

Satisfactory treatment effect was observed by 6% of the main group and 27% of the control group patients. Treatment failure was observed in 2% of controls. With a chronic course of inflammation of CPN, positive dynamics was recorded in all patients of the main group and only in 87% of patients of the control group. Other authors noted a similar picture [5, 6]. It should be

noted that in the control group the disease was protracted, and the restoration of the pathological process was more delayed compared to the main one. The average duration of treatment was 5-6 days, which is 2-3 days less compared to the effect on the mucous membrane of CPN with drugs during their topical use.

CONCLUSION

Thus, the comparative analysis demonstrated the safety and effectiveness of regional therapy, as well as its superiority over parenteral (systemic) use of antibacterial drugs.

REFERENCES

1. Arefieva N.A., Soveliyeva E.E., Aznabaeva L.F., Kilsenbaeva F.A. Efficacy of using amoxicillin clavulanate and betaleikin in the treatment of chronic purulent recurrent sinusitis//Russian rhinology. - 2002. - №2. - S. 124-125.
2. Bogomilsky MR, Tarasov A.A. Antimicrobial therapy of acute and exacerbations of chronic sinusitis//Clinical antimicrobial chemotherapy. - 2000. - №2. - S. 63-67.
3. Grigorieva N.V. Galotherapy in the complex non-functional treatment of patients with acute purulent sinusitis. Bulletin of Otorhinolaryngology. - 2003. - № 4. - S.42-44
4. Derzhovina L.L. Morpho-physiological features of the nasal cavity are normal and in non-functional disorders according to the methods of anterior active rhinopneumetry of acoustic rhinometry. Autoref. diss.kand.med.nuk. Yaroslavl, - 2008. - 26 s.
5. Limansky S.S. Drainage of the nasal sinuses through the natural stomachs/S. S. Limansky, S. A. Lapina, M. A. Reshetov//Materials of the XVI Congress of Otorhinolaryngologists of the Russian Federation. – 2001. - S. 611-615.
6. Piskunov S.Z. Isolated lesions of the wedge-shaped sinus/S.Z. Piskunov, I.S. Piskunov, A.M. Ludin. - Kursk, 2004. - 152 s.
7. Rizaev ZHA, Khazratov A.I. Carcinogenic effect of 1,2-dimethylhydrazine on the body as a whole//Biology. – 2020. - T. 1. - S. 116.
8. RizaevZh. A. and others. Personalized therapy of generalized periodontitis based on integral assessment of clinical and laboratory indicators//Journal "Problems of Biology and Medicine." – 2021. – №. 3. - S. 120.
9. Z. , Z. D. (2022). Rehabilitation and Treatment Algorithm for Patients with Ocular Ischemic Syndrome on the Background of Arterial Hypertension. central asian journal of medical and natural sciences, 3(2), 211-213. <https://doi.org/10.17605/OSF.IO/SYA5K>
10. Ryazantsev S.V. Acute sinusitis approaches to therapy: method. recommendations/S.V. Ryazantsev. - M., 2003. - 16 s.
11. Ulaschik V.S. Low-frequency ultrasound effect on the body, therapeutic application and research prospects V.S. Ulaschik. //Vopr. balneology, physiotherapy of therapeutic physical culture. 2000, - NO. 6 - S. 3-8.
12. ShamatovI.Ya., et al. Complex treatment of chronic rhinosinusitis in the stage of exacerbation//Re-health journal. – 2019. – №.2. - S. 5-10.
13. Tanzer, M. Enhancement of bone growth into perous intramedullary implants using non-invasive how intensivtyultrasounal/M. Tanser, S. Kantor, J.D.Bobyn J. //Orthop, Res. - 2007. - Vol.19.№2. -P.195-199.