

Importance of Indicators of Nitroxidergic System in Improving the Treatment of Acute and Chronic Purulent Sinusitis

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Abstract: In this article, an understanding of sinusitis, a topic relevant in today's medicine, is given, and detailed information is also given about their treatment methods. In addition, examples of new treatment measures are provided.

Keywords: Nitrosidergic system, use of nitrosidergic means, sinusitis, acute sinusitis, purulent and infectious sinusitis, paranasal sinusitis.

PARANASAL SINUSITIS - inflammation of the paranasal sinuses

It ranks first among diseases of the ENT organs. Inflammation of the nasal cavities is the natural way to release the secretions inside the cavity develops when it becomes difficult. The procedure is carried out simultaneously in several cavities of the nose polysinusitis when spreading, inflammation of the paranasal sinuses on one side -hemisinusitis and pansinusitis, when all adjacent cavities of the nose are inflamed is called.

Etiology. Infection spreads to the paranasal cavity from the nasal cavity, teeth or other purulent foci, develops after injuries possible Bacterial flora, primarily pneumococci, Streptococcus pneumoniae, Haemophilus influenzae, Moraxella catarrhalis, Staphylococcus aureus, hemolytic streptococcus, Escherichia coli, gram-positive and gram-negative bacteria contribute to the development of the disease. bacilli, sometimes influenza and parainfluenza viruses, adenoviruses, fungi. It is caused by Chlamydia pneumoniae and Mycoplasma pneumoniae bacteria. Sharp the same microflora is often detected in sinusitis, and different microflora in chronic sinusitis. The state of local and general immunity is important in the development of the disease is important. In infectious diseases (diphtheria, scarlet fever, measles) the infection is close to the nose spreads into the cavity through the hematogenous way. In 10% of cases, the upper jaw is responsible for the development of inflammation of the upper jaw cavity the second one with few roots and many roots located next to the lower wall of the cavity caused by apical granuloma of first molars. In this case, the disease usually anaerobic microflora provokes, discharge has a peculiar smell. In this case, sinusitis is chronic and only after the damaged tooth is treated will be eliminated.

The size and structure of the nasal cavity is important in the development of the disease: the larger the cavity, the more inflammation, the process tends to develop. The nose is the largest among the adjacent cavities cavity is the maxillary cavity, which is relatively more inflamed. High the natural opening of the jaw cavity opening to the middle nasal passage is located above the cavity, making it more difficult to remove the pathological separation in the upper jaw cavity into the nasal cavity. Acute sinusitis, mainly influenza, influenza, measles, scarlet fever, wounds, tuberculosis and others can develop as a complication of infectious diseases. Nose and nose various injuries of the paranasal sinuses, foreign bodies in the nasal cavity, dangerous and safe tumors also cause their inflammation. The development of chronic sinusitis is caused by weakening

of local and general immunity, auto-allergy, bacterial allergy, hypertrophy of the lower and middle nasal conchas, nasal septum curvature, nasal tumor from the paranasal sinuses, development of chronic sinusitis, making it difficult to remove pathological discharge will help.

In acute sinusitis, pathological anatomical changes are manifested by redness, infiltration and swelling of the mucous membrane of the cavity. Migration of the epithelial layer, accumulation of lymphocytes, neutrophils and eosinophils are observed in some areas. Pimples appear on the mucous membrane of the walls of the nasal cavities serous, mucous, purulent, hemorrhagic, fibrinous or mixed in the cavity exudate accumulates. Chronic sinusitis is mainly caused by proliferation process in connective tissue, infiltration of lymphocytes, neutrophils, plasma cells, formation of inflammatory tumors and polyps. Diagnosis. A patient with a disease of the paranasal sinuses undergoes the following examinations:

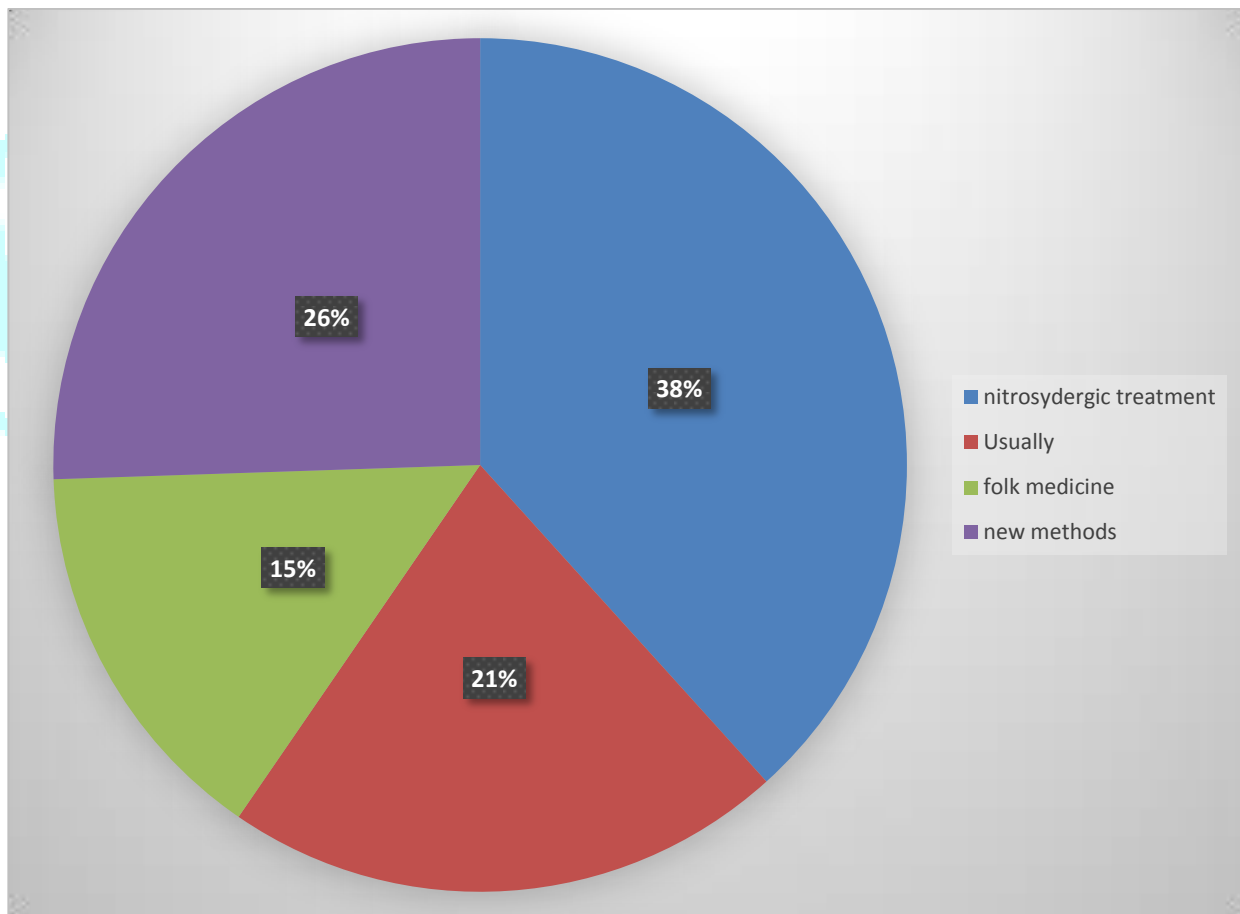
- Analysis of patient complaints and anamnesis data;
- General clinical and biochemical analyses, otorhinolaryngological examination (front and back rinoscopy, examination of the function of the nose and adjacent nasal cavities);
- Bacteriological and virological, allergological examination of cavity separation;
- Endoscopic examination (endophotography), if necessary, sinusoscopy;
- Biopsy and cytological examination (according to the instructions);
- X-ray examination of nasal cavities, including contrast by substance;
- Computed tomography (CT), magnetic resonance imaging (MRT) (required at birth);
- Diagnostic (treatment) of the forehead, forehead and upper jaw cavities sensing;
- Piercing the upper jaw cavity for diagnostic purposes (according to the instructions).

In case of inflammation of the adjacent nasal cavities, it is performed in different directions X-ray examination is widely used. CT and MRI examinations performed in coronary and axial directions are performed in addition to X-ray examination. If the CT allows to map the layers of the examined organ, to determine its structure and density, then the MRI examination helps to determine the soft tissue structures. Wide range of ultrasound waves (1.5-10 mGs) the examination performed with the help of the nasal cavity inflammation is widely used in determining. Modern endoscopy and endophotography examinations of the nose and nose allows you to see the complex structures of adjacent spaces. Rigid and flexible optical instruments with different viewing angles (endoscope, fiberscope and microscope) are used in practice. Such examinations are nose and nose Pathological that is not visible during normal examinations of adjacent spaces helps to detect changes and inflammatory process early. Check if you have. Sinuses are the air chambers in the bone behind your cheeks, eyebrows and jaw. They make mucus, a fluid that cleans bacteria and other particles out of the air you breathe. Tiny hairs called cilia (“sill-ee-ah”) sweep mucus out of your sinuses so it can drain out through your nose. What are the symptoms of sinusitis? The symptoms include:

- Pain or pressure in the forehead,
- cheeks, nose and between the eyes
- Headache
- Fever

- Nasal congestion
- Reduced sense of smell and taste
- Cough, which may be worse at night
- Bad breath (called halitosis)
- An ache in the teeth.

When sinusitis is caused by a bacterial or viral infection, you get a sinus infection. Sinus infections sometimes occur after you've had a cold. The cold virus attacks the lining of your sinuses, causing them to swell and become narrow. Your body responds to the virus by producing more mucus, but it gets blocked in your swollen sinuses. This built-up mucus is a good place for bacteria to grow. The bacteria can cause a sinus infection. This can occur because of changes in temperature or air pressure. Allergies can cause sinusitis. Using decongestant nasal sprays too much, smoking, swimming or diving can also increase your risk of getting sinusitis. Some people have growths called polyps (say: "pawl-ips") that block their sinus passages and cause sinusitis. The following diagram shows the share of sinusitis treatment methods today.



How is acute sinusitis treated? Treatment for sinusitis depends on the cause. Various Over-The-Counter medications may help relieve your symptoms. You can use a saline nasal spray, which will clean out your nasal passages and help clear congestion. Your doctor may recommend a prescription nasal spray that helps treat inflammation. Saline sinus rinses often bring relief to patients with chronic sinus or rhinitis problems.

There are several different commercial products available (i.e. Neti Pot), that you may use. If you have sinus pain or pressure, a decongestant may help your sinuses drain. Decongestants are generally only recommended for short-term use. Over-the-counter pain relievers such as acetaminophen (i.e. Tylenol) and ibuprofen (i.e. Advil, Motrin) can ease headache and sinus pain. If your case of sinusitis is very severe and your doctor thinks the cause is bacterial, he or she may prescribe an antibiotic. You may take an antibiotic for 10 to 14 days, but you will usually start feeling better a couple of days after you start taking it. It is important to take antibiotics exactly as your doctor tells you and to continue taking it until it is completely gone, even after you're feeling better. If allergies are causing your sinusitis, your doctor may treat the allergy. Then the sinusitis will usually clear up on its own.

What else should I discuss with my healthcare professional? Current health concerns Any symptoms not related to my sinuses Illnesses for which another healthcare professional is treating or has treated me Current medications and supplements Antibiotics I have taken recently Allergies or adverse reactions I've had to medications Other prescription medications I am taking, such as steroids, heart medications, diabetes medications Over-the-counter medications such as NSAIDs Concerns about possible side effects The best way to take my medications How my diet may affect my medications Herbal supplements, or vitamins I'm taking Lifestyles Changes in my diet Changes in my sleep patterns Upcoming travel plans My pregnancy

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