



# MODERN APPROACHES IN THE TREATMENT OF CHRONIC SINUSITIS

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Article history:	Abstract:
<b>Received:</b> October 28 <sup>th</sup> 2024 <b>Accepted:</b> November 26 <sup>th</sup> 2024	Chronic sinusitis is one of the most common diseases of the paranasal sinuses, which has a significant impact on the patient's quality of life. According to statistics, this pathology affects a large number of people, and many of them experience relapses and long-term problems despite conservative treatment. In today's fast-paced world, where people often cannot afford to recover for extended periods, there is a growing need for effective and minimally invasive treatment methods. This is where endovascular treatment becomes an important and relevant tool.

**Keywords:** endovascular treatment, chronic sinusitis, minimally invasive methods, nasal sinus treatment.

## INTRODUCTION:

Chronic sinusitis is one of the most common upper respiratory tract diseases that can significantly degrade the patient's quality of life. Issues with the nasal sinuses, persistent inflammation, nasal congestion, and headaches are all characteristic symptoms of the disease. In recent years, with the development of medical technologies, endovascular treatment has become an increasingly popular method for managing chronic sinusitis. This method offers several advantages for both doctors and patients. In this article, we will discuss what endovascular treatment is, its benefits, and how it is applied in the treatment of chronic sinusitis. Each year, the number of patients with chronic sinusitis continues to grow. One of the main reasons is improper or delayed treatment of acute sinusitis, which leads to the development of a chronic form of the disease. Environmental factors, climate changes, and frequent respiratory infections are also important contributors to the increase in incidence. In such conditions, methods that can effectively treat sinusitis while minimizing harm to the body become especially relevant. Modern advances in medicine and technology allow the application of endovascular methods to treat various diseases, including chronic sinusitis.

Endovascular treatment is a minimally invasive method in which surgery is performed through a small puncture in the skin or mucous membrane, without the need for large incisions. The procedure is carried out using special catheters that are introduced through the blood vessels to reach the affected area. In the treatment of chronic sinusitis, the endovascular method is used to improve blood supply, normalize drainage from the nasal sinuses, and reduce inflammation.

Advantages of endovascular treatment of chronic sinusitis:

1. Minimal tissue trauma: The main advantage of endovascular treatment is its minimal invasiveness. The procedure is performed through a small puncture, reducing the risk of injury to surrounding tissues. This avoids complex incisions, significant bleeding, and prolonged recovery. Patients typically experience minimal pain during and after the procedure.
2. Quick recovery: After endovascular treatment, patients can return to their daily lives much faster than after traditional surgical interventions. The recovery period is much easier and quicker, making this method appealing to those who do not want to spend long periods on sick leave.
3. Less pain: The procedure is performed under local anesthesia, and most patients report that the pain during the procedure is minimal. After the procedure, discomfort is usually minimal, and the intensity of pain significantly decreases the following day.
4. Elimination of inflammation and improved drainage: Endovascular treatment effectively combats the chronic inflammation that accompanies sinusitis. This method helps restore the normal flow of mucus from the nasal sinuses, which is crucial for preventing relapses and improving breathing.
5. Reduction of the risk of complications: Since the endovascular method does not require large incisions and is associated with less tissue trauma, the risk of complications after surgery is significantly reduced. Patients are less likely to encounter infections or bleeding, which also contributes to faster recovery.
6. High effectiveness: Endovascular treatment allows direct intervention on the affected areas, minimizing the impact on healthy tissues. This increases the effectiveness of the treatment and reduces the likelihood of disease relapse. In some cases, patients report significant improvement in their condition within just a few days after the procedure.



7. Reduced rehabilitation time: After undergoing the endovascular procedure, patients can resume their daily lives without the need for prolonged rehabilitation. This is especially important for individuals with an active lifestyle who do not want to interrupt their work or other important activities.

The treatment process involves several stages. Initially, a diagnosis is performed to accurately determine the degree of damage to the nasal sinuses and to decide whether endovascular treatment is suitable for the particular patient. Then, a catheter is introduced through a puncture in the skin or mucous membrane into the nasal sinuses, which allows medications or other therapeutic agents to be delivered directly to the site of inflammation. In some cases, to improve mucus drainage and reduce swelling, the doctor may use additional methods such as balloon sinuplasty. This technique involves expanding narrowed passages in the sinuses using a special balloon, which helps normalize drainage and reduce inflammation. The procedure is performed under local anesthesia, and after it is completed, the patient can leave the medical facility on the same day. Recovery usually occurs within a few days, and the patient can return to their usual activities.

#### **CONCLUSION:**

Endovascular treatment of chronic sinusitis is a modern, safe, and effective method for combating this common disease. Its advantages include minimal tissue trauma, quick recovery, and high effectiveness. For many patients, this method has become a true lifesaver, as it avoids prolonged surgeries and accelerates the healing process. It is important to note that before choosing a treatment method, one should consult a doctor who will assess all possible risks and select the most appropriate solution for each individual case. Endovascular treatment of chronic sinusitis continues to develop, and its role in modern medicine is steadily growing, opening new possibilities for treatment and improving the quality of life for patients.

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