

Chapter 8

APPROACH TO CHRONIC RHINOSINUSITIS

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DEFINITION

The paranasal sinuses are normally air-filled cavities in the skull and face, and are connected to the nasal cavity by small openings called ostium. The surface of the sinus bones is covered with ciliated columnar epithelium into the pseudostratified and the mucus produced in the sinus is transmitted to the natural ostium independently from the gravity, while air passage through the same connection holes is reversed. The development of edema in the mucosa of these ostia may result in sinus inflammation.

Sinusitis is defined as the inflammation of the epithelium lining sinus cavities. Rhinosinusitis is an important disease that affects 5-15% of the population and its prevalence and incidence is increasing.

Chronic rhinosinusitis is a condition in which the inflammation of the paranasal sinus mucosa lasts longer than 12 weeks with the nasal mucosa. Symptoms for more than 12 weeks have been reported in the table 1.

Table 1: Chronic rhinosinusitis major and minor symptoms	
Major symptoms	Minor symptoms
Nasal discharge	Headache
Nasal obstruction	Pain in the ear-fullness
Loss of smell	Halitosis
Percent congestion	Fever
Percent pain-pressure sensation	Tiredness

Chronic sinusitis with polyps in the middle meatus called polyps chronic rhinosinusitis, without polyps are called non-polyps chronic rhinosinusitis. Figure 1 also shows the left middle meatus polyps and chronic sinusitis.

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steroid and nasal irrigation. Macrolide treatment can be stopped according to the patient's condition.

Treatment is started with intranasal corticosteroid and nasal irrigation, culture and long-term macrolide in patients with moderate or severe severity. Radiological examination and surgery are recommended if no response is received after three months.

CHRONIC RHINOSINUSITIS AND ENDOSCOPIC SINUS SURGERY

If there is insufficient response, paranasal CT is planned and FESS is planned.

The main objective in endoscopic sinus surgery is removal of pathological tissue such as polyp or purulent material debris, restoration of healthy sinus ostium. One of the most important principles of surgery is that the healthy mucosa should not be damaged.

The size of the ESC to be applied in chronic rhinosinusitis should be determined specifically according to the findings obtained on paranasal computed tomography after maximal medical treatment. In patients with limited disease in the maxillary sinus and osteomeatal region, although unisectomy and middle meatal antrostomy provide an adequate treatment option, it is recommended to use total sphenoidectomy in cases with widespread opacification in all sinuses. The size of the antrostomy to be established in endoscopic sinus surgery is one of the most frequently discussed issues. Although some experts argue that the wide range of antrostomy provides good ventilation, there are also those who state that it is not an added advantage. In addition, the approach to anatomical variations in computed tomography is also controversial. Among these, the most common concha bullosa is involved in many studies where this anatomical variation does not lead to chronic rhinosinusitis.

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