What is chronic rhinosinusitis with nasal polyps (CRSwNP)?

CRSwNP is considered as a chronic inflammatory condition of the nose and sinuses that is characterized by the presence of nasal polyps. Nasal polyps are noncancerous lesions that develop in the lining of the nasal sinuses or nasal passages. They are typically found in people with asthma, aspirin sensitivity, allergic fungal disease, and cystic fibrosis.

How do nasal polyps develop?

Nasal polyps develop due to chronic inflammation in the sinuses or nasal passages, such as allergies or infections. They are often associated with other chronic conditions, such as asthma, aspirin sensitivity, and cystic fibrosis. The size of the polyps can vary from microscopic to several centimeters, resembling a bunch of grapes in appearance.

Diagnosis of Nasal Polyps

There are various scoring systems measuring the size or severity of nasal polyps, such as the nasal polyp score (NPS) and the intranasal polyp score (INPS). The Visual Analogue Scale (VAS) score helps evaluate the severity of the condition. Symptoms-related questions answered by patients will help diagnosis by providing a total severity VAS score.

Impact and burden of CRSwNP

Although the disease is not visible, people with nasal polyps may have significantly impaired quality of life (QoL). CRSwNP is associated with asthma, cystic fibrosis, and aspirin sensitivity. Specificity, these conditions can include asthma, aspirin sensitivity, allergic fungal disease, and cystic fibrosis. The annual direct healthcare costs of CRS in US was estimated to be $8.6 billion.

Treatment and management of CRSwNP

Currently, there are several options available for the management of CRSwNP. Oral corticosteroids are recommended for patients with CRSwNP with ≥2 symptoms. For patients with ≥3 symptoms, intranasal corticosteroids are recommended. For patients with ≥4 symptoms, intranasal corticosteroids and systemic corticosteroids may be considered.

CRSwNP is an allergy driven disease. Antibodies produced by the immune system – found in CRSwNP – do not reach below the inferior border of the middle turbinate (projections of soft tissue on the side walls of the nasal cavity). Large polyps reaching the lower border of the inferior turbinate can cause nasal airways obstruction, while small polyps reaching the upper border of the inferior turbinate might cause a sinonasal obstruction or nasal polyposis.

One of the symptoms should be nasal discharge along with either facial pain/discomfort, facial pressure/fullness, or a feeling of blockage or congestion in one or both nostrils.

Impact on patients

Patients with recurrent polyps reported increased overall medication costs compared with patients with/without polyps. In particular, asthmatics have increased overall medication costs compared with patients with/without polyps.

Impact on healthcare costs

Presence of nasal polyps is considered when first line of treatment fails. Intranasal corticosteroids may be considered if treatment fails. For patients with ≥3 symptoms, intranasal corticosteroids are recommended. For patients with ≥4 symptoms, intranasal corticosteroids and systemic corticosteroids may be considered.

Risk factors for nasal polyps include conditions that can trigger chronic inflammation disorder that can restrict blood flow to vital organs and tissues. These conditions can include asthma, aspirin sensitivity, allergic fungal disease, and cystic fibrosis.

The nose is connected to the brain and can be a source of headaches. Chronic rhinosinusitis is a condition that can cause headaches and other symptoms, such as nasal discharge and facial pain.

4 Patient. Nasal Polyps. Available at: https://patient.info/ears-nose-throat-mouth/nasal-polyps-leaflet
5 ENT UK. Nasal Polyps. Available at: https://www.entuk.org/nasal-polyps Accessed May 2019
7 All about Nasal Polyps. Available at: https://www.medicalnewstoday.com/articles/177020.php