

Vasomotor Rhinitis – A Common Cause of Nasal Polyps

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Study of 30 cases of nasal polyps was conducted at E.N.T Unit 1 of Mayo Hospital Lahore from February 1994 to September 1995 with an aim to identify possible causes of nasal polyps in our population. Majority of the patients were male (77 %) and the median age of presentation was 42 years. Infection of nose and paranasal sinuses was found in 7 patients (23 %) while allergy was found to be the cause in 10 patients (33 %). Rest of the 13 patients (43 %) was found to have vasomotor rhinitis. This study signifies the importance of vasomotor rhinitis in the etiology of nasal polyps.

Keywords: Vasomotor rhinitis; allergy; nasal polyps.

Nasal polyps were first described more than 3000 years ago and identified as the most common nasal masses. Despite this long history and frequent occurrence, the exact cause of nasal polyps is not known.

Many factors including vasomotor instability, allergic reaction and infection are considered responsible for nasal polyps. There is no single obvious cause despite similar histological picture in all cases.

Vasomotor Rhinitis is an exaggerated physiological process rather than a disease¹. The clinical presentation of vasomotor rhinitis is much like allergic rhinitis but no causative agent is recognized. There are two clinically recognized types of vasomotor rhinitis. Some of these patients have predominantly runny nose while the other group usually presents with nasal blockage. It is the latter group, which has increased eosinophilia in their nasal secretions while the patients with rhinorrhoea do not have eosinophilia in their nasal secretions. Nasal polyposis is almost certainly a part of the disease complex comprising of eosinophilic non-allergic rhinitis. Approximately 30% of patients with eosinophilic non-allergic rhinitis have nasal polyps in their nose².

The purpose of this study was to identify and evaluate the role of vasomotor rhinitis in cases of nasal polyps in our population

Materials and Methods

Thirty consecutive patients of nasal polyps were evaluated in this study prospectively. All these patients were managed in E.N.T Unit 1 of Mayo Hospital from February 1994 to September 1995 after being admitted through the outpatient department. A special Performa was prepared for this study and the history, examination, laboratory data and treatment were recorded on it for each patient. All patients underwent detailed questioning regarding the epidemiology and clinical features of nasal polyps. In addition to general investigations, nasal smear and skin tests were also carried out. All patients underwent paranasal sinus X-rays.

Result

Out of the 30 patients included in this study, 23 (77 %) were males and 7 (23 %) were females thus showing a male to female ratio of 3:1. The age of these patients

ranged from 30 to 55 years with the median age of 42 years. Predominant symptom was nasal blockage found in all patients. Sneezing and rhinorrhoea occurred in 18 patients (60%). 30 % (9 patients) were previously operated for nasal polyps. History of bronchial asthma was present in 5 patients (17 %) and one patient had triad of asthma, aspirin sensitivity and nasal polyps. Nasal smears showed eosinophilia in 27 patients (90 %). Infection of nose and paranasal sinuses was detected clinically and radiographically in 7 patients (23 %). Skin testing was positive in 10 patients (33 %) and 13 patients (43 %) were found to have vasomotor rhinitis.

Discussion

Nasal polyps are a common clinical condition, which despite of differing theories of etiology remains a poorly understood disease. Conditions causing nasal polyps mainly include Vasomotor Rhinitis, allergy and infection. To find a single etiology on the basis of history and clinical examination is difficult and requires expensive and specialized testing.

Traditionally allergy has been implicated as an etiological factor because of three factors. Histological picture of nasal polyps where eosinophilia is present in 90%³, skin testing which is positive in 25%⁴ and history of asthma in 20-40%.

In the current history our criteria for diagnosing allergy was clinical history and skin testing. The history consisting of 5 or more attacks of continuous sneezes at least once per week and profuse uncontrolled rhinorrhoea along with redness of eyes and itching of nose, eyes and palate was regarded significant. Skin testing was positive in 10 patients (33%).

Infection of paranasal sinuses seen in large number of patients of nasal polyps in different studies^{6,7}, but whether infection causes nasal polyps or infection is the result of nasal polyps is not known. In our study 7 patients (23%) had infection of nose and paranasal sinuses diagnosed clinically and confirmed by Paranasal sinus X-rays and peroperatively.

Vasomotor Rhinitis is implied because majority of cases of nasal polyps are not atopic and no obvious allergen can be found. According to a study by Monaret Vautrin et al in 1990⁸, about 60 % of patients with non-

allergic rhinitis with eosinophilia syndrome have nasal polyps. They hypothesized that there is an autonomic nervous system dysfunction with an imbalance between sympathetic and parasympathetic activity. Our diagnosis of vasomotor rhinitis was based on the fact that majority of our patients had no clear history of allergy and skin testing was negative in 13 patients. These patients also had clear paranasal sinus x-rays and negative returns on antral lavage per operatively. Our study albeit small serves to highlight the existence of vasomotor rhinitis as an important cause of nasal polyps.

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