

A Review of the Commonest Symptoms in Patients with Nasal Polyposis and the Improvement after Endoscopic Surgical Management

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ABSTRACT

Aim: To establish the commonest symptoms in patients having nasal polyps and improvement in those symptoms after endoscopic surgical management.

Place of study: Department of EN, Jinnah Hospital/ Allama Iqbal Medical College, Lahore

Methods: 50 patients were selected from OPD who were diagnosed cases of nasal polyps. A standard questionnaire was presented to them and symptoms of the patients were recorded both pre-operatively and post-operatively. All the patients were subjected to endoscopic sinus surgery and the improvement of the five categorical symptoms were labeled post operatively after a follow up of two months..

Result: The symptoms grouped under five major category showed nasal obstruction being the commonest symptom, followed by rhinorrhea and post nasal dripping, snoring

Conclusion: The study showed nasal obstruction as the commonest symptom with improvement of symptoms after the endoscopic surgical management in these patients of nasal polyps.

Keywords: Nasal polyps, endoscopy, rhinorrhea

INTRODUCTION

A Greek language word “poly-pous” means multiple footed. Nasal polyposis is a morphological term applied to oedematous mucosa and submucosa of the nose and the para nasal sinuses^{1,2}. Nasal polyps has a multifactorial characteristics and are mostly associated with Asthma and Aspirin sensitivity^{3,4}. It is a disease of middle aged gender, rarely affecting children below 10 years of age⁵. It occurs in all races and all social classes with strong male predominance from 4:1. Nasal polyps is an invading disease whose evaluation is dominated by functional symptoms such as anosmia, nasal obstruction, rhinorrhea and less frequently pain and sneezing⁶. The diagnosis of chronic sinusitis with nasal polyps is based on nasal endoscopy with computed tomographic scans⁷. Simple nasal polyps are bilateral and multiple, and there treatment management requires surgical removal of the polyps⁸. With regards to the surgical treatment endoscopic sinus surgery has become widely accepted surgical procedure for the treatment of chronic inflammatory sinus disease⁹. Surgical management of nasal polyps have shown significant improvement in the quality of life of patients with nasal polyposis and chronic sinusitis¹⁰. The morbidity associated with nasal polyposis includes altered quality of life, nasal obstruction, anosmia, chronic sinusitis, headache, snoring and post nasal discharge. In certain situations the nasal polyps can alter the cranio facial skeleton, because unremoved

polyps can extend intracranially into the orbital vault, causing proptosis and hypertelorism¹¹. Severity of nasal polyps ranges from mild nasal congestion to complete nasal blockage however massive polyposis can cause obstructive sleep symptoms and chronic mouth breathing. Nasal polyps show evidence of epithelial damage¹² and this abnormality is evident in the form of nasal rhinorrhea. Altered sense of smell has been demonstrated in literature due to nasal polyps¹³. Epistaxis has also been reported in a few cases of nasal polyps¹⁴. Post nasal drip ranging from white to yellow and green in nasal polyps depends upon the exacerbation of nasal symptoms and it improves after surgery. Other associated complaints with nasal polyps range from watering of eyes and facial pain. There is a remarkable improvement in the symptoms after sinus surgery of the patients with chronic sinusitis with nasal polyposis¹⁵.

This study was designed with the purpose to evaluate the effectiveness of endoscopic sinus surgery in improvements of primary symptoms of patient with chronic sinusitis and nasal polyposis.

MATERIAL AND METHOD

Fifty patients presenting with nasal polyps were studied at ENT department of Jinnah Hospital Lahore, which is a tertiary care teaching hospital with an acute ENT unit. Diagnosis of chronic sinusitis with nasal polyposis was made on the basis on nasal endoscopy and computed tomographic scans of nose and para nasal sinuses. A standard questionnaire was prepared and history, examination and pre-operative symptoms of the patients were recorded. The five categorical symptoms of nasal obstruction, rhinorrhea, post nasal drip, snoring and ophthalmic

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complications were recorded in a standard questionnaire. Endoscopic sinus surgery was performed in the operation theater under general anesthesia on all the 50 patients. And follow up was carried out at an interval of 2 months for the categorical five symptoms.

RESULTS

The patients who presented with nasal polyposis were selected from all age groups. The age ranged from 6-65years. The maximum number of patients 32 was upto 25 years of age. Chronic sinusitis with nasal polyps in our study showed male predominance 37:13 male to female ratio which is similar with the findings in the literature. The commonest symptom was nasal obstruction (96%), followed by rhinorrhea (50%), post nasal drip (36%), snoring (22%) and ophthalmic complications (6%). All the patients were treated with endoscopic sinus surgery with 2 months post operative follow up. 41 patients (82%) were seen during follow up. 85% of the patients were satisfied with the surgery. The improvement of five categorical symptoms in the patients was as follows nasal obstruction (93%), Rhinorrhea (89%), Post nasal discharge (91%), snoring (90%) and ophthalmic complications.

Table 1:Age distribution.

Age Group	n	%age
1-25years	32	64
26-40 years	12	24
41-65 years	6	12

Table 2: Genderwise distributioun.

Gender	n	%age
Male	37	7
Female	13	26

Table 4:Presenting features

Symptoms	%age
Nasal Obstruction	96
Rhinorrhea	50
Postnasal Drip	36
Snoring	22
Eye Complications	6

DISCUSSION

Endoscopic sinus surgery is a minimally invasive technique used to restore sinus ventilation and normal function. The anatomy should be demonstrated with computed tomographic scans before endoscopic sinus surgery¹⁶. All patients with nasal polyposis were included in the study. The commonest presentation with nasal polyps was nasal obstruction (96%) in our study which coincides with the study conducted by Dufour X et al which showed nasal obstruction (88.3%) as the most common

presentation as well. In our study the symptoms improved as follows; Nasal Obstruction (93%), Rhinorrhea (89%) and Post nasal drip (91%). These results also favour international studies according to which the treatment of symptoms with nasal polyps requires endoscopic sinus surgery and it provides long term results.

CONCLUSION

The rationale behind the endoscopic sinus surgery is that localized pathology in the osteomeatal complex blocks the ostia and lead to inflammation in the dependent sinuses. The surgical intervention of the procedure are designed to remove the osteomeatal blockage and restore normal sinus ventilation and mucociliary functions. The study showed good results using functional endoscopic sinus surgery.

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