

Clinico-Demographic Profile of Cases with Sino-Nasal Polyposis at a Tertiary Care Hospital in Eastern Uttar Pradesh

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ABSTRACT

Introduction: Patients with sino-nasal polyps has typically presented with nasal stuffiness and rhinorrhea, facial pain and less often headache. Sino-nasal polyps have the prevalence of about 4% cases of nasal obstruction. Aim of present study is to evaluate the clinico-demographic profile of sino-nasal polyposis in a tertiary care hospital of Eastern Uttar Pradesh.

Material and Methods: Present study was a cross-sectional descriptive study conducted in the department of Otolaryngology at tertiary care hospital, District Azamgarh, U.P. during the period of 6 months (from January 2019 to June 2019). All Patients having history of nasal obstruction due to sino-nasal polyposis attending Otolaryngology OPD were included in the study while patients presenting with congenital mass, having tumors and psychiatric patients were excluded from the present study. Data was analyzed by SPSS statistical software. Frequency, percentage and mean were used to present the data.

Results: In present study maximum cases (32.5%) of polyps were reported from the age group 11- 20 years followed by age group 21-30 years (18.75%). Most common site of origin of polyps was ethmoidal (65.0% cases) followed by antrochoanal (32.5% cases). Out of total 80 patients, 55 cases (68.75%) belong to male while 25 cases (32.5%) were females showing male preponderance. Most common presenting symptom in ethmoidal polyps and antrochoanal polyps was nasal discharge (in each case 100%) and nasal obstruction.

Conclusions: Ethmoidal polyps are the most commonly observed sino-nasal polyps and more commonly seen in young and middle age group while antrochoanal polyps are commonly seen in younger generation. Most common presenting symptoms were nasal stiffness and rhinorrhea.

Keywords: Sino-nasal Polyp, Nasal Obstruction, Ethmoidal Polyp, Nasal Discharge.

recurrences in case of nasal polyps are more common. Successful treatment depends upon the management of underlying sinus disease. Therefore treatment of nasal polyps is one of the major challenges for both conservative and surgical approaches including endoscopic sinus surgery. Aim of present study is to evaluate the clinico-demographic profile of sino-nasal polyposis in a tertiary care hospital of Eastern Uttar Pradesh.

MATERIAL AND METHODS

Present study was a cross-sectional descriptive study conducted in the department of Otolaryngology at tertiary care hospital, District Azamgarh, U.P. during the period of 6 months (from January 2019 to June 2019). All Patients having history of nasal obstruction due to sino-nasal polyposis attending Otolaryngology OPD were included in the study while patients presenting with congenital mass, having tumors and psychiatric patients were excluded from the present study. Detail history was collected from all patients and clinical examination was done as per standard protocol. Informed consent was taken from all patients/guardians before starting study. Data was collected by using a pre-tested and edited proforma. Data was analyzed by SPSS statistical software. Frequency, percentage and mean were used to present the data.

RESULTS

Table 1 shows age wise distribution of different type of polyps. In present study maximum cases (32.5%) of polyps were reported from the age group 11- 20 years followed by age group 21-30 years (18.75%). Most common site of origin of polyps was ethmoidal (65.0% cases) followed by antrochoanal (32.5% cases). Ethmoidal polyps were reported from all age groups but majority of them (23.07%) were observed in the age group 31-40 years. All antrochoanal polyps were reported in the less than 40 years age group but

INTRODUCTION

Nasal polyps are defined as painless, generally pearly white and prolapsed pedunculated parts of the nasal mucosa. Sino-nasal polyps are unique in position and composition.¹ Patients with sino-nasal polyps has typically present with nasal stuffiness and rhinorrhea, facial pain and less often headache.² Sino-nasal polyps have the prevalence of about 4% cases of nasal obstruction.³ On clinical examination, polyps appear as edematous tissue mass arising from middle meatus and prolapsing into the nasal cavity.⁴

Therapy of nasal polyps may be either medical or surgical, with steroids being the mainstay of the medical treatment.² Endoscopic sinus surgery (FESS) provides better sinus drainage by removing polyps. Irrespective of type of therapy,

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Age group (in yrs)	Site of origin of polyps				Total
	Ethmoidal	Antrochoanal	Sphenoidal	Frontal	
< 10 yrs	3	4	-	-	7 (8.75%)
11-20 yrs	9	17	-	-	26 (32.5%)
21-30 yrs	10	4	1	-	15 (18.75%)
31-40 yrs	12	1	-	1	14 (17.5%)
41-50 yrs	10	-	-	-	10 (12.5%)
51-60 yrs	6	-	-	-	6 (7.5%)
>60 yrs	2	-	-	-	2 (2.5%)
Total	52 (65.0%)	26 (32.5%)	01 (1.25%)	01 (1.25%)	80 (100%)

Table-1: Age-wise distribution of different type of polyps

Symptoms	Ethmoidal polyps	Antrochoanal Polyps
Nasal discharge	52 (100%)	26 (100%)
Headache/facial pain	37 (71.15%)	7 (26.9%)
Nasal obstruction	52 (100%)	26 (100%)
Hyposmia	36 (69.23%)	6 (23.07%)
Mouth breathing	27 (51.92%)	22 (84.61%)
Hyponasal voice	23 (44.23%)	20 (76.92%)
Post nasal drip	19 (36.53%)	21 (80.76%)
Excessive sneezing	24 (46.15%)	7 (26.9%)
Epistaxis	4 (7.69%)	6 (23.07%)
Total	52	26

Table-2: Distribution of cases by presenting symptoms

Duration (in months)	Ethmoidal polyps	Antrochoanal Polyps
1-3 months	5 (9.61%)	0 (0.00%)
4-6 months	24 (46.15%)	10 (38.46%)
7-9 months	12 (23.07%)	7 (26.92%)
10-12 months	10 (19.23%)	4 (15.38%)
>12 months	1 (1.92%)	5 (19.23%)
Total	52(100%)	26 (100%)

Table-3: Distribution of cases by duration of symptoms

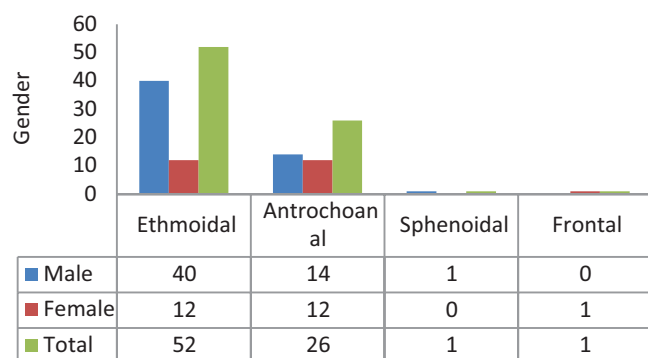


Figure-1: Gender wise distribution of polyps

majority of them (65.38%) were seen in the age group 11-20 years.

Figure 1 shows gender wise distribution of polyps in present study. Out of total 80 patients, 55 cases (68.75%) belong to male while 25 cases (32.5%) were females showing male preponderance. Out of 52 cases of ethmoidal polyps, 40 cases (76.92%) were male and in cases of antrochoanal polyps,

53.84% cases belong to male showing male preponderance. Table 2 shows distribution of cases by presenting symptoms. Most common presenting symptom in ethmoidal polyps and antrochoanal polyps was nasal discharge (in each case 100%) and nasal obstruction. In ethmoidal polyps, headache, hyposmia were more common presenting complaint in comparison of antrochoanal polyps. While mouth breathing, hyponasal voice, post-nasal drip and epistaxis were more common presenting complains in cases of antrochoanal polyps.

Table 3 shows distribution of cases by duration of symptoms. In ethmoidal polyps, majority of cases (46.15%) belong to 4-6 months duration of symptoms followed by 7-9 months duration in 23.07% cases. In cases of antrochoanal polyps, majority of cases (38.46%) belong to 4-6 months duration of symptoms followed by 7-9 months duration in 26.92% cases.

DISCUSSION

Our study reported maximum cases (32.5%) of polyps from the age group 11- 20 years followed by age group 21-30 years (18.75%). In present study, 81.25% polyp cases belong to 11-50 years age group. Similar results were observed by Shruthi PV et al.⁵ and Lathi et al.³ It can be inferred from the results of various studies that sino-nasal polyps are commonly observed among young and middle age groups. All antrochoanal polyps were reported in the less than 40 years age group but majority of them (65.38%) were seen in the age group 11-20 years. Study done by Freitas et al.⁶ found that 68.75% cases of antrochoanal polyps were seen within 20 years of age. This shows that antrochoanal polyps are seen in young age in comparison of ethmoidal polyps.

In our study, out of total 80 patients, 55 cases (68.75%) were male while 25 cases (32.5%) were females showing a male to female ratio of 2.2:1. Similar results were observed by Newton et al.⁷ which showed male to female ratio of 2:1. Studies done by Zafar et al.⁸ and Lathi et al.³ also showed male preponderance but male to female ratio was lower in comparison of present study.

Most common site of origin of polyps was ethmoidal (65.0% cases) followed by antrochoanal (32.5% cases), sphenoidal polyp (1.25% cases) and frontal polyp (1.25%). Results of present study coincide with the result of study done by Rawat et al.⁹ and Shruthi PV et al.⁵ It can be inferred from the results of various studies that Ethmoidal polyps are the most

commonly seen sino-nasal polyps.

In our study, most common presenting symptom in ethmoidal polyps and antrochoanal polyps was nasal discharge (in each case 100%) and nasal obstruction. In ethmoidal polyps, headache, hyposmia were more common presenting complaint in comparison of antrochoanal polyps. While mouth breathing, hyponasal voice, post-nasal drip and epistaxis were more common presenting complains in cases of antrochoanal polyps. Similar results were observed in the studies done by Sharma et al.¹⁰ and Lathi et al.³ there also nasal obstruction and nasal discharge were the most common symptoms in sino-polyp cases.

In our study, in cases of ethmoidal polyps, majority of cases (46.15%) belong to 4-6 months duration of symptoms followed by 7-9 months duration in 23.07% cases. In cases of antrochoanal polyps, majority of cases (38.46%) belong to 4-6 months duration of symptoms followed by 7-9 months duration in 26.92% cases. Similar results were observed by the Shruthi PV et al.⁵ where 4-6 months duration of symptoms was 47.3% and 35% in ethmoidal and antrochoanal polyp cases respectively.

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