

Diagnostic and Therapeutic Endoscopy in Nasal Obstruction – Our Experience

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Abstract: *Introduction:* A large number of patients present to the ENT outpatient department with complaints of nasal obstruction. causes of which could be neoplastic, non neoplastic or anatomical abnormalities in the nose paranasal sinus or nasopharynx. Based on clinical presentation imaging techniques and diagnostic endoscopy, clinical diagnosis can be ascertained. *Aim:* To study the a) incidence of various causes of nasal obstruction. b) Its age predilection c) sex predilection d) to ascertain site of origin and histopathological type. *Method:* 100 Cases who presented with nasal obstruction in the ENT outpatient department McGann Hospital SIMS, Shimoga were studied from September 2014 to July 2015. *Result:* Out of the 100 cases studied majority of the patients were found to have deviated nasal septum (38%) and incidence was equal amongst male & female (1:1). Out of the 100 cases maximum cases were in the second and third decade of life. Male female ratio was 1.43 clearly showing male preponderance. 38% presented with DNS, 24% presented with sinusitis, 19% nasal polyposis, 4% with nasal mass (2 with nasal hemangioma and 2 with fibro angioma), 13% patients presented with adenoid hypertrophy and 1 case each of atrophic rhinitis and rhinoscleroma. *Conclusion:* Incidence of deviated nasal septum was highest closely followed by sinusitis and nasal polyposis and incidence of male preponderance was highest in the present study.

Keywords: DNS ,PNS,Nasopharynx,, non neoplastic

1. Introduction

A large number of patients present to the ENT outpatient department with complaints of nasal obstruction. Causes of which could be neoplastic, non neoplastic Leisons or anatomical abnormalities in the nose paranasal sinus or nasopharynx. Based on clinical presentation imaging techniques and diagnostic endoscopy, clinical diagnosis can be ascertained.

2. Objective

To study the a) incidence of various causes for nasal obstruction. b) Its age predilection c) sex predilection d) to ascertain site of origin and histopathological type.

3. Methods and Material

100 Cases who presented with nasal obstruction in the ENT outpatient department McGann Hospital SIMS, Shimoga were studied from September 2014 to July 2015.

4. Results

• Age incidence of obstructive causes in nose paranasal sinus and nasopharnx

Age	Incidence	Percentage(%)
1 to 10 Years	12	12%
11 to 20 Years	30	30%
21 to 30 years	29	29%
31 to 40 year	14	14%
41 to 50 year	12	12%
51 to 60 year	2	2%
61 to 70% year	1	1%
Total	100	100

Incidence of causes of nasal obstruction and male / female ratio

Cause	Percentage	Male/ female ratio
DNS	38%	1:1
DNS with sinusitis	24%	2.42:1
Nasal polyposus	19%	1.11 :1
Adenoid hypertrophy	13%	2.25:1
Nasal mass	4%	3:1
Atrophic rhinitis	1%	0:1
Rhinoscleroma	1%	1:0

Incidence of site of origin

Site	Percentage
Nasal cavity	44%
PNS	43%
Nasopharynx	13%

5. Discussion

Out of the 100 patients studied nasal obstruction symptoms were found to be commonest between 11 to 20 years of age group closely followed by 21-40 age group. Majority of the patients were males. (59 males and 41 female)m:f ratio- 1.4:1

Commonest cause of nasal obstruction was deviated nasal septum. (38%) closely followed by sinusitis (24%) and nasalpolyposus (19%). Out of the 100 patients 4 patients who presented with nasal mass 2 patients had nasal capillary hemangioma and were of less than 10 years age group, and other two had fibroangioma, and who were between 30 to 40 years age group. Site predilection was highest in nasal cavity (44 cases), followed by paranasal sinus 43%. only 13% had nasopharynx as site of origin.

6. Comparison With Other Study

Zafar study) in relation to site and sexual predilection.

Our study is comparable with standard study Uzma Comparative study of site predilection

Site	Uzma Zafar (No. of Cases)	Percentage	Present study (No. of Cases)	Percentage
Nasal cavity	108	74.48	44	44%

Comparative study of sexual predilection

Comparative study of different types of lesion causing nasal obstruction

sex	Uzma zafar :no of cases		Present study: no of cases	
male	94	64.83%	59	59%
female	51	35.17%	41	41%
Total	145	100%	100	100%

Type of lesion	Uzma Zafar (No. of Cases)	Percentage	Present study (No. of Cases)	Percentage
Nasal polypoidosis	119	82.06	19	19%
Rhinoscleroma	6	4.14%	1	1%
Hemangioma	7	12.5%	2	2%
Fibroangioma	24	42.8%	2	2%

7. Conclusion

In the present study deviated nasal septum was the commonest cause for the nasal obstruction and showed male preponderance. Least incidence was that of granulomatous diseases causing clinical symptoms of nasal obstruction.

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