

Original Research Article

To evaluate nasal endoscopic finding in patient with chronic nasal obstruction

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Abstract:

Background & Method: The aim of this study is to evaluate nasal endoscopic finding in patient with chronic nasal obstruction. A total of 100 patients from age group 01-70 years irrespective of sex with complaints of chronic nasal obstruction, who were unresponsive to routine appropriate medical therapy, were selected for this study. The chronic rhinosinusitis was defined in the patient population as representing a state of persistent or recurrent disease of paranasal sinus frequently associated with nasal obstruction, headache, nasal congestion, mucopurulent rhinorrhea, facial pains, hyposmia. The signs and symptoms must persist for at least 12 weeks to qualify as chronic rhinosinusitis.

Result: Various pathological abnormalities were detected by nasal endoscopy in middle meatus and at anterior ethmoid region (i.e. osteomeatal complex area), The important findings were deviated nasal septum in 80% of cases, mucopurulent discharge in middle meatus seen in 100% of cases, out of which 36% were unilateral and 64% were bilateral. The other important finding was polypoidal changes in middle meatus area and in infundibulum seen in 28% cases, out of whom 20% showing unilateral and 8% cases showing bilateral changes. 48% of Patients were having MTH or concha bullosa out of which 20% of patients were unilaterally only and 28% of patients bilateral.

Conclusion: Most of the patients with PNS pathology were from 21-30 age group. Slight male preponderance was noted. Endoscopy allows an exceptionally clear and well illuminated field with the added advantage of the ability to inspect the recess with angled distal lenses. It helps in diagnosis of sinonasal pathology by revealing structural details and anatomical variations in the nasal cavity to a greater extent. It allows accurate definition of the extent of lesion and early diagnosis of recurrence is also possible. Nasal endoscopy allows the identification of areas of inflammation in the nasal cavity.

Keywords: nasal, endoscopic, chronic & obstruction.

Study Designed: Observational Study.

1. INTRODUCTION

The obstructed nose does not exist in isolation. It influences numerous organ frameworks, assortment of correspondence problems, orofacial formative deformity, and smell capability as well as the psyche[1]. In certain moments, the "far off" impact might eclipse the side effect of nasal hindrance itself.

An impeded or "stodgy" nose addresses quite possibly of the most widely recognized patient grievance. The rundown of conceivable finding is long. The issue can be self-restricted or steady, an independent concern or part of a variety of symptoms[2]. Kids start life as commit nasal breathers and nasal deterrent in youngsters can present as an emotional aviation route affront. As the youngster ages, nasal blockage is a side effect usually credited to basic rhinitis or adenoid hypertrophy with little thought given to the chance of a huge fundamental problem[3]. Nasal check in these patients might appear as apnoeic spells during taking care of, extreme nasal stodginess, constant one-sided or respective rhinorrhea or on the other hand if serious as respiratory trouble upon entering the world.

The inward nose is comprised by two nasal depressions reaching out from the nares to the choanae. The nasal depression is around a right triangle in frame, marginally more extensive toward its focal position. The nares lead into the vestibule, the skin-lined piece of the nasal hole that contains the vibrissae (nasal hairs), the hair follicles, and the sebaceous glands[4].

The nasal depression is partitioned by the nasal septum, which is made out of bone more proximally and ligament all the more distally. The mediocre, center, and predominant turbinates in the nasal cavity advance air filtration, humidification, and temperature regulation[5]. The nasal pit and turbinates are fixed with mucosa contained pseudostratified columnar ciliated epithelium that overlies a storm cellar layer and the submucosa (lamina propria). The submucosa comprises of serous and seromucous nasal organs, nerves, broad vasculature, and cell components. Overlying the nasal epithelium is a slender layer of bodily fluid that powerfully moves through ciliary activity to the back nasopharynx. Diseases (viral or bacterial) and hypersensitive irritation debilitate mucociliary leeway. Since nasal tissues are exceptionally vascular, vascular changes can prompt huge nasal obstruction[6&7].

2. MATERIAL & METHOD

This study is conducted in the department of Otorhinolaryngology at M.M.C.H & R.I. Kanchipuram from Sept 2019 to June 2020.

Patients going to the short term branch of otorhinolaryngology with clinical proof of ongoing or repeating intense rhinosinusitis non receptive to proper clinical treatment.

A sum of 100 patients from age bunch 01-70 years independent of sex with grievances of constant nasal deterrent, who were lethargic to routine proper clinical treatment, were chosen or this review. The constant rhinosinusitis was characterized in the patient populace as addressing a condition of diligent of repetitive illness of paranasal sinus regularly connected with nasal impediment, migraine, nasal clog, mucopurulent rhinorrhea, facial torments, hyposmia. The signs and side effects should persevere for something like 12 weeks to qualify as persistent rhinosinusitis.

3. RESULTS

Table No. 1: (Showing Age and sex distribution)

Age	No of cases		
	Male	Female	Total
0-10	08	00	08
11-20	10	04	14
21-30	18	18	36
31-40	10	14	24

41-50	04	08	12
51-60	02	02	04
61-70	02	00	02
Total	56	44	100

The majority of the cases were of age group 21-30 which were 36 cases (36%) out of which 18 were male 18 female and minimum 02 case in age group 61-70.

Table No.2: (Presenting complaints)

Symptoms	No. of cases	%
Nasal obstruction	100	100%
Nasal discharge	100	100%
Nasal mass	28	28%
Disorders of olfaction	34	34%
Headache	34	34%
Sneezing	32	32%
Epistaxis	12	12%
Postnasal drip	62	62%
Eyes-watering, itching, proptosis	08	8%
Ear	08	8%

Patients were considered have nasal obstruction due to nasal mass, anatomical abnormality, chronic rhinosinusitis if they have persistent or recurrent disease of paranasal sinus frequently associated with headache, nasal congestion, mucopurulent rhinorrhea, facial pains, hyposmia. The signs and symptoms must persist for at least 12 weeks to qualify as chronic rhinosinusitis.

Table No. 3: (Showing nasal endoscopic finding)

Finding	Total no. of case	%	Unilateral case	%	Bilateral case	%
MPD in MM	100	100%	36	36%	64	64%
Septal deviation	80	80%	78	78%	02	2
ITH	66	66%	24	24%	42	42%
MTH or CB	48	48%	20	20%	28	28%
Oedematous and Polypoidal infundibular mucosa/polyp in nasal cavity	28	28%	20	20%	08	8%

Various pathological abnormalities were detected by nasal endoscopy in middle meatus and at anterior ethmoid region (i.e. osteomeatal complex area), The important findings were deviated nasal septum in 80% of cases, mucopurulent discharge in middle meatus seen in 100% of cases, out of which 36% were unilateral and 64% were bilateral. The other important finding was polypoidal changes in middle meatus area and in infundibulum seen in 28% cases, out of whom 20% showing unilateral and 8% cases showing bilateral changes. 48% of Patients were having MTH or concha bullosa out of which 20% of patients were unilaterally only and 28% of patients bilateral.

4. DISCUSSION

Males and females ratio was 2.4:1. Most extreme number of patients were in the 10-20 yrs age bunch 44%. In our concentrate out of 100 patients 28 [56%] of patients were guys and 22 [44%] of patients were females. Most extreme quantities of patients were in the 21-30 yrs age bunch [18 patients {36%}] with equivalent sex ratio[8].

In an investigation of Patel et al the primary introducing grumblings of patients was nasal impediment 84.76%, nasal release 78.26% and migraine in 100 percent patients, nasal mass 24% [9].

The primary introducing grumblings of patients in our review is nasal impediment 100 patients [100%], nasal release 100 patients [100%] and postnasal trickle in 31 patients [62%]. Other protests were migraine in 17 patients [34%] problem of olfaction in 17 patients [34%], sneezing in 16 patients [32%], nasal mass 14 patients [28%], epistaxis in 6 patients [12%], eyes-watering, tingling, in 4 patients [8%] and ear objections in 4 patients [8%].

In front rhinoscopy separated from DNS which was available in 72% of cases, the other most clear irregularities identified at assessment of nose and paranasal sinuses were mucoid and mucopurulent release seen in 100 percent of patients of whom 36% had one-sided and 64% had reciprocal discharge [10]. ITH was seen in 54% of patients of whom 22% had one-sided and staying 32% of patients had two-sided discoveries. MTH was seen in 32% of patients of whom 22% of patients had one-sided hypertrophy and rest 10% of patients had reciprocal hypertrophy. Out of complete 100 cases, 28% of patients introduced nasal polyps on foremost rhinoscopic examination [11]. Other minor discoveries were sinus delicacy in 22% of patients of whom 12% had one-sided 10% had two-sided. Be that as it may, in investigation of Patel et al DNS 94%, ITH 41.30%, MTH 38.78%, nasal release 100 percent, nasal mass 28%.

5. CONCLUSION

Most of the patients with PNS pathology were from 21-30 age group. Slight male preponderance was noted. Endoscopy allows an exceptionally clear and well illuminated field with the added advantage of the ability to inspect the recess with angled distal lenses. It helps in diagnosis of sinonasal pathology by revealing structural details and anatomical variations in the nasal cavity to a greater extent. It allows accurate definition of the extent of lesion and early diagnosis of recurrence is also possible. Nasal endoscopy allows the identification of areas of inflammation in the nasal cavity.

6. REFERENCES

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