



A Clinicopathological Study of Nasal Septum Perforation in Tertiary Care Hospital, Kadapa

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Abstract

Background: Septal perforation is an uncommon but bothersome illness. Treatment of nasal septal perforation mainly depends on etiology. The objectives of this study is to review the prevalence of each etiological factor causing septal perforation.

Methods: The material for this study consists of 14 patients presenting with nasal crusts, Nose bleed, Nasal discomfort to the ENT OPD, GGH, Kadapa. All information's were recorded including age, sex, address, detailed symptomatology, local examination and laboratory reports.

Results: In the present study, we registered 14 nasal septal perforation cases. Among these, 2 patients out of 14 the cause is found to be Leprosy, 1 patient the cause is found to be Atrophic rhinitis, 3 patients the cause is found to be Post-operative, 1 patient the cause is found to be TB, 2 patients the cause is found to be Trauma, 1 patient the cause is found to be drug abuse, 1 patient the cause is found to be FB, 3 patients the cause is found to be unknown.

Conclusion: Though leprosy is supposed to be extinct, the Otorhinolaryngologists shall keep in mind, leprosy as a cause of pathological perforation even today.

Keywords: nasal septal perforation, granulomatous diseases of nose.

Introduction

Nasal septal perforation is through and through defect of nasal septum. Perforation of nasal septum is a curious clinical entity. The exact prevalence of septal perforations is unknown as many perforations are asymptomatic but in a general otorhinolaryngology practice, the clinician will encounter several nasal septal perforations each year.

The etiology of nasal septal perforation are trauma, granulomatous diseases, irritants and malignant diseases.

The prevalence of chronic infections producing perforations is small. In developing countries like

India specific infections such as TB, Leprosy, Syphilis are still common causes.

In many cases, it is asymptomatic but when symptomatic, patient have recurrent epistaxis, nasal crusting, whistling dryness, and nasal obstruction.

Anterior perforations are generally symptomatic, while posterior perforations are asymptomatic as the inspired air is rapidly humidified by nasal mucosa.

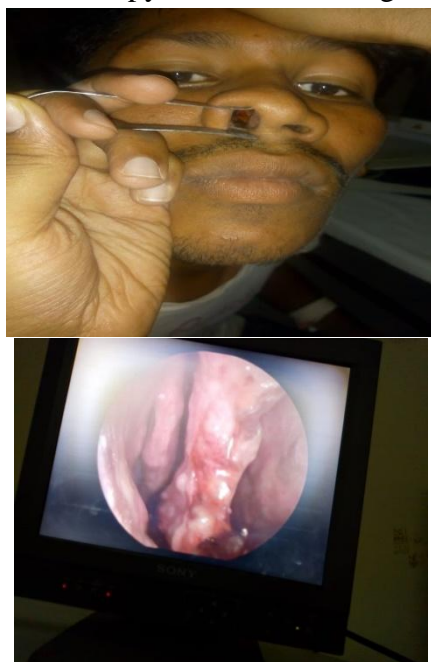
The treatment of nasal septal perforation is symptomatic, prosthetic or surgical. Surgery may be a curative but the results are not always satisfactory as evidenced by different operative

procedures. Prevention of septal perforation should be an important goal.

Patients & Methods

This study is a prospective study done in GGH, Kadapa from January 2018 to December 2018. The study group consists of 14 patients attending to ENT outpatient department, with complaints of nasal crusts, nasal bleed, whistling, nasal discomfort, nose block. To establish the cause of septal perforation, A detailed history was taken principally as it is important to identify nasal trauma, cautery or surgery, substance abuse. External and internal nasal examination was done together with nasal endoscopy. Nasal endoscopy was done to assess the margins and state of the residual septum.

Anterior Rhinoscopy and DNE Findings



After detailed examination these patients were sent for specific investigations like:

- 1) Nasal smear to rule out TB / Leprosy
- 2) Split stain smear of ear lobule to rule out leprosy
- 3) Quartiferin TB gold assay test to rule out TB
- 4) XC- ANCA Titres- Elevated in Wegner’s granulomatous
- 5) ACE Titres – high titre in sarcoidiasis
- 6) VDRL- to rule out Syphilis
- 7) Biopsy of edges of perforation-Wegner’s granulomatous
- 8) ESR - to rule out malignancy and chronic infections.

Even after all these investigations, we are unable to find any specific cause for septal perforation in some patients.

Results

The present study was conducted on 14 patients . A detailed history was elicited and clinical examination was done. According to history and clinical examination the patients were sent for relative laboratory investigations. The results obtained in this study were shown below.

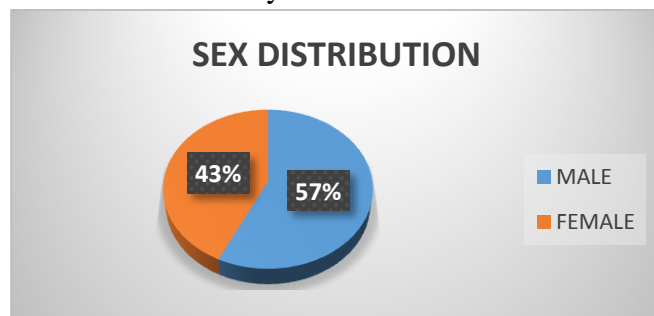


Fig.1: Sex Distribution of Cases

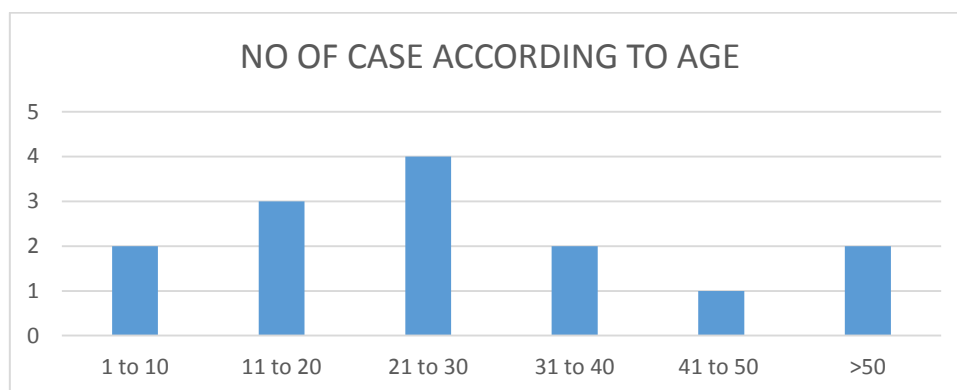


Fig. 2: Age Distribution of Cases

cause	no of cases	percentage
leprosy	2	14.2%
atrophic rhinitis	1	7.1%
post operative	3	21.4%
tuberculosis	1	7.1%
trauma	2	14.2%
substance abuse	1	7.1%
foreign body	1	7.1%
unknown	3	21.4%

Fig .3.Symptoms

Discussion

According to age and sex, our results show that high prevalence of nasal septal perforation is seen in young males as compared to females. This is maybe due to number of male population which undergo nasal septal correction and trauma, industrial exposure, irritant drug use.

A cross sectional study in United Kingdom done on industrial workers who are exposed to metal plating solutions conducted by questionnaire and clinical examination revealed that 14% had nasal septal perforation. Those with perforation were younger than 35 years at the time of perforation.

According to etiology, our study shows that 2 out of 14 patients, the cause of nasal septal perforations to be Lepromatous Leprosy.

In leprosy, the nose is an important portal for entry of this bacteria and is therefore frequently affected.

Depending upon the host immune response, nasal symptoms of leprosy may include epistaxis, gross nasal deformity and destruction. On nasal endoscopy friable granulomatous intranasal lesion involving the septum with associated crusting.

Leprosy which was declared eradicated in India one and a half decade ago has re-emerged in different states with high intensity.

India has the highest number of new leprosy cases in the world, followed by Brazil and Indonesia.

In our study,

2 patients out of 14 the cause is found to be Leprosy

1 patient the cause is found to be Atrophic rhinitis.

3 patients the cause is found to be Post-operative.

1 patient the cause is found to be TB

2 patients the cause is found to be Trauma

1 patient the cause is found to be drug abuse

1 patient the cause is found to be FB.

3 patients the cause is found to be unknown.

Conclusion

Though leprosy is supposed to be extinct, the Otorhinolaryngologists shall keep in mind, leprosy as a cause of pathological perforation even today.

Now a days postoperative and trauma causes of nasal septal perforation cases are reduced significantly.

Acknowledgements

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