



Rhinolith: A Case Report

Authors

Pankaj Chauhan¹, Disha Sharma², Harjitpal Singh³, Bharti Ranot⁴, Trilok C. Guleria⁵

¹MS Otorhinolaryngology, Regional Hospital, Kullu, H.P., India

²⁻⁵Department of Otorhinolaryngology, Dr Radhakrishnan Govt. Medical College, Hamirpur, H.P., India

*Corresponding Author

Disha Sharma

Department of Otorhinolaryngology, Dr Radhakrishnan Govt. Medical College, Hamirpur, H.P., India

Abstract

Rhinolith means stone of the nose and are rare calcareous concretions. Most common complaint is ipsilateral foul smelling purulent rhinorrhea with nasal obstruction. Endoscopic surgical removal is the treatment of choice. We present an unusual case of 24 years old female with history of foul smelling nasal discharge from right nasal cavity for six months.

Keywords: *Rhinolith, Calcareous, Endoscopic.*

Introduction

Rhinolith are rare calcareous concretions formed by deposition of calcium carbonate, calcium phosphate, magnesium, iron, aluminium along with organic substances such as glutamic acid as inflammatory reaction to endogenous or exogenous foreign bodies¹. Exogenous rhinoliths are formed around foreign materials, fruits and stones etc, whereas endogenous can occur around body tissues like tooth, sequestra, mucous, or blood clots^{2,3}. We present an unusual case of 24 years old female with history of foul smelling nasal discharge from right nasal cavity for six months.

Case Report

A 24 years old female presented with the complaints of foul smelling nasal discharge for the last six months in our OPD. There was history of blood stained discharge off and on associated with nasal obstruction which was slowly progressive. There

was no history of any trauma or foreign body insertion in the past, no history of post nasal drip excessive sneezing and any other systemic illness. On anterior rhinoscopy blackish mass was seen lying in the floor of right nasal cavity which on probing was hard with irregular surface and bleed on touch. X-ray paranasal sinuses was done which showed an opaque shadow in the right nasal cavity (Fig 1). Rigid nasal endoscopy was done which showed black irregular mass the right nasal cavity floor (Fig 2). Clinical and radiological diagnosis of rhinolith was made. Endoscopic removal was done under local anaesthesia. 20×15×3mm of rhinolith was removed (Fig 3). Nasal douching with normal saline was done and patient was discharged on antibiotic nasal ointment as well as oral antibiotics. Follow up was done after 3 weeks patient was completely relieved of her symptoms.

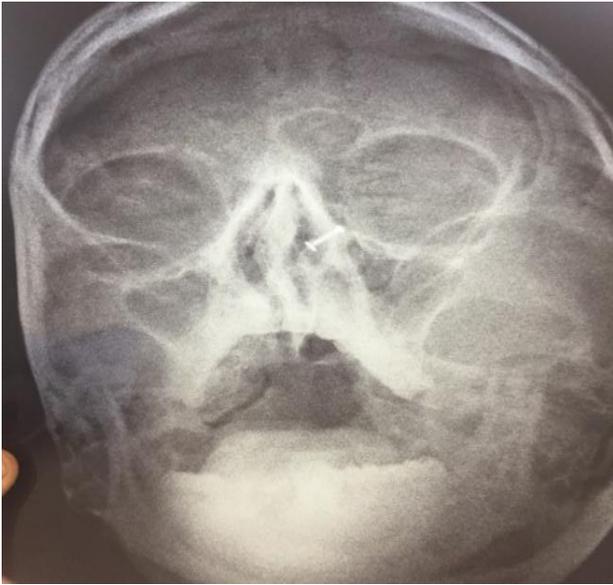


Fig 1: X-ray paranasal sinuses was done which showed an opaque shadow in the right nasal cavity

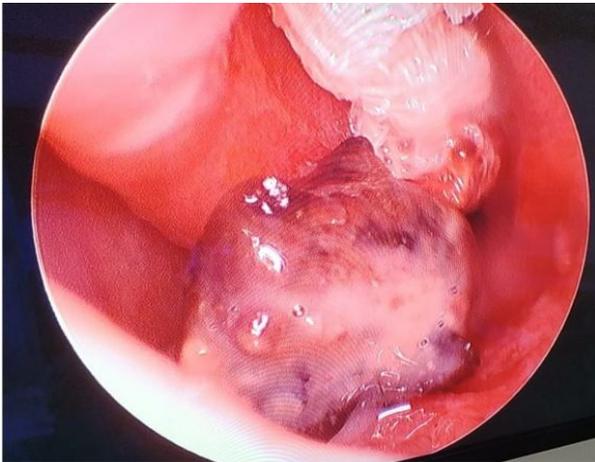


Fig 2: Rigid nasal endoscopy showing black irregular mass the right nasal cavity floor.



Fig 3: Showing rhinolith of size 20×15×3mm

Discussion

Rhinolith means stone of the nose. It develops due to slow, continuous deposition of calcium and magnesium salt layers present in nasal secretions

over a nidus. As they are the source of bad smell rhinolith cause social concern. It is also believed that pathogenesis of rhinolith involves entry of foreign body and its impaction in the floor of the nasal cavity⁴. Endogenous nidus includes thick piece of mucus or bone fragments. Foreign bodies like paper or seeds include exogenous nidus which is usually seen in children⁵. Most common complaint is ipsilateral foul smelling purulent rhinorrhea with nasal obstruction which was also seen in our patient. Headache, sinusitis and epistaxis are some other symptoms which may be seen. Anterior rhinoscopy and rigid endoscopy should be included along with radiological investigations like plain radiography and computed tomography of para nasal sinus⁶. In these cases medical treatment has not been found effective. Endoscopic surgical removal is the treatment of choice and in rare conditions external approach like lateral rhinotomy may be needed¹.

Conclusion

When dealing with unilateral nasal symptoms such as nasal obstruction, foul smelling rhinorrhea or nasal bleed conditions like chronic sinusitis, allergic fungal sinusitis, osteomas, odontomas are suspected but rhinolith being rare entity requires a high index of suspicion and should be kept in mind.

References

1. Shamanna K, Shivakumar KL, Rajput R. An Unusual Case of Foreign Body in the Nose Presenting as Rhinolith. *Journal of Evidence Based Medicine and Health Care*. 2014;1(7): 450-454.
2. Ezsias A, Sugar AW. Rhinolith: an unusual case and an update. *Ann. Otol. Rhinol. Laryngol.*1997; 106: 135– 8.
3. Nass duce M, Talas DU, Ozer C, Yildiz A, Apaydin FD, Ozgur A. Antrolithiasis: a retrospective study. *J. Laryngol. Otol.* 2003; 117: 637– 40.
4. Shah FA, George S, Reghunandan N. A case presentation of a large rhinolith. *Oman Med J.* 2010;25(3):230- 231.

5. Ali M. Giant 'staghorn' rhinolith in a 15-year-old girl. *BMJ Case Rep.* 2018;11(1): e227587.
6. Hadi U, Ghossaini S, Zaytoun G. Rhinolithiasis: A forgotten entity. *Otolaryngol Head Neck Surg.* 2002;126:48-51.