

Case Report

Rhinolith in a 37-year-old lady: a case report of an unusual presentation

Khairullah Bin Anuar*

Department of Otorhinolaryngology, Universiti Sains Islam Malaysia, Nilai, Negeri Sembilan, Malaysia

Received: 02 January 2023

Revised: 27 March 2023

Accepted: 01 April 2023

*Correspondence:

Dr. Khairullah Bin Anuar,

E-mail: drkhairul@usim.edu.my

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Rhinoliths are uncommon nasal masses. They are mineralized masses found within the nasal cavity. Their clinical presentation can be varied. We presented a 37-year-old lady with previous history of lymphoma presented with 6 months history of left sided nasal blockage associated with purulent nasal discharge and cacosmia. Rigid nasoendoscopy showed irregular hard mass along the floor of nasal cavity. Computed tomography (CT) scan was performed and showed left intranasal mass with calcification. Subsequently the rhinolith was removed endoscopically under general anesthesia. Unusual foreign body was found within the rhinolith. Following the removal, she had uneventful recovery. This case has to be treated carefully as with previous history of lymphoma it might suggest recurrence. However, it also illustrates the importance of rigid nasoendoscopy and the radiological assessment in establishing the diagnosis and management of rhinolith.

Keywords: Rhinolith, Nasal obstruction, Rigid nasoendoscopy

INTRODUCTION

Rhinolith is a relatively rare condition and is caused by gradual deposition and coating of different salts of calcium and magnesium from body fluids over an object inside the nasal cavity that could be endogenous (eg, thick mucus) or exogenous (piece of paper, seed).¹ Since it is an insidious and slow process symptoms gradually develop over period of months and years. In some patient it remain asymptomatic but some causing persistent or recurrent nasal infections and cacosmia with blood-stained rhinorrhoea usually unilaterally. This continues until someone discovers the rhinolith.

CASE REPORT

We presented a 37-year-old lady with previous history of lymphoma presented with 6 months history of left sided nasal blockage associated with purulent nasal discharge and cacosmia. Rigid nasoendoscopy showed irregular hard mass along the floor of nasal cavity. Computed

tomography (CT) scan was performed and showed left intranasal mass with calcification. Subsequently the rhinolith was removed endoscopically under general anesthesia. Unusual foreign body was found within the rhinolith. Following the removal, she had uneventful recovery.

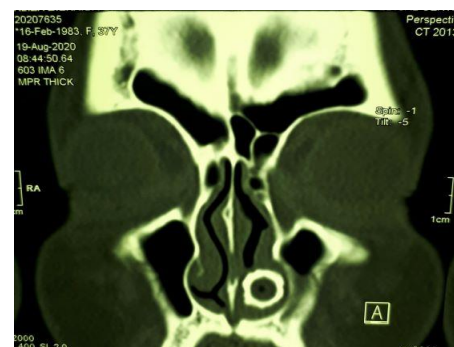


Figure 1: CT scan which showed left intranasal mass with calcification.

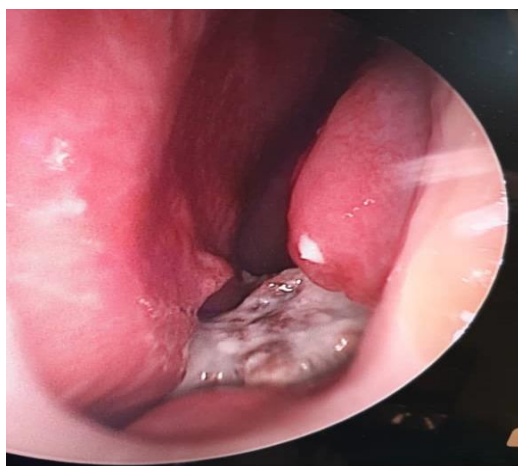


Figure 2: Initial nasoendoscopy showed intranasal mass along the floor of nasal cavity.

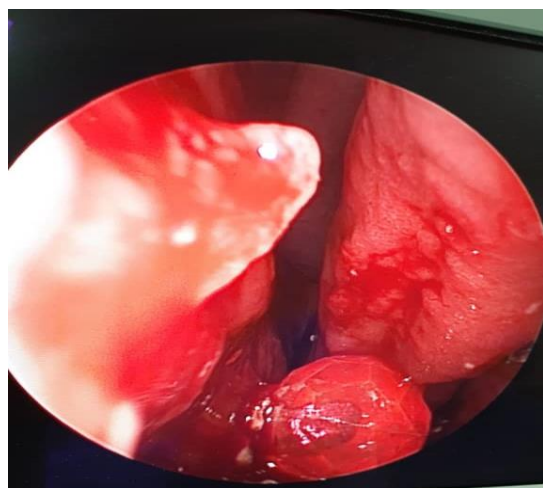


Figure 3: Following uncapping the rhinolith, a foreign body identified.

DISCUSSION

Rhinolith is not very common; incidence reported as 1 in 10 000 ENT outpatients in one of the studies.¹ It literally can be translated as 'stone of the nose'.^{2,3} It is not a foreign body per se as it is not introduced from outside but it develops inside the nasal cavity by continuous, slow, layer-by-layer deposition of calcium and magnesium salts present in the nasal secretions over a nidus.⁴ This process takes years to develop. The nidus may be endogenous or exogenous.⁵

Endogenous nidus means something that belongs to the body itself like thick inspissated mucus or a piece of mucus membrane or bone fragment. Exogenous nidus is always a foreign body like a piece of paper or tissue or a seed introduced into the nasal cavity. This is usually seen in small children or those who are mentally challenged. The diagnosis of a foreign body nose can be made with this history alone but sometimes patients either do not seek medical care or are sometimes misdiagnosed and

prescribed treatment on the lines of rhinosinusitis often over considerable period of time.

Sometimes patients may have no nasal symptoms at all and may present with halitosis.² For this patient she did not reveal initially the history of foreign body nose inserted during childhood but she had history of lymphoma few years ago. With such history we need to be careful and thorough in managing the case. The availability of rigid and fibre-optic nasal endoscopes can assist in making diagnosis. Also, CT scan sometimes has to be done as in our case, the rhinolith was demonstrated in the CT scan.^{3,5}

Although diagnosis of rhinolith is straightforward sometimes they have to be differentiated from inflammatory conditions like sinusitis, allergic fungal sinusitis and neoplastic conditions like osteoma, ossifying fibroma and other malignancies. However, clinical and radiological examinations can easily rule them out.² As the patient has history of lymphoma, the main aim of the general anaesthesia was a proper examination under anaesthesia and giving the surgeon a controlled environment in anticipating complication i. e.; severe bleeding, adhesion and others. With considerable manipulation, bleeding was expected. Following local haemostasis, anterior nasal packing was not needed in this case. The patient usually makes full recovery afterwards with resolution of symptoms.

CONCLUSION

This case illustrates the challenge is establishing the diagnosis as with previous history of lymphoma might suggest recurrence and rhinolith is relatively rare. However, with proper assessment with rigid nasoendoscopy, imaging modality such as CT scan and intraoperative findings, diagnosis finally can be made. Patient usually made uneventful recovery following operation.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Vidasalam S, Sipaul F, Hill A, Porter G. Nasendoscopy for unusual nasal symptoms. *BMJ Case Rep.* 2010;2010:bcr0420102911.
2. Aziz Y, Chauhan J, Hasan SA, Hashmi SF. Staghorn rhinolith in nasopharynx: an unusual case. *Indian J Otolaryngol Head Neck Surg.* 2008;60(1):91-3.
3. Singh AK, Gujar M, Shiral S, Raizada RM. Rhinolith: An unusual presentation. *Indian J Otolaryngol Head Neck Surg.* 2004;56(4):297-8.
4. Shah FA, George S, Reghunandan N. A case presentation of a large rhinolith. *Oman Med J.* 2010;25(3):230-1.
5. Chatziavramidis A, Kondylidou-Sidira A, Stefanidis A, Soldatou S. Longstanding rhinolith leading to

anatomical alterations of the ipsilateral inferior nasal meatus and turbinate. *BMJ Case Rep*. 2010;2010:bcr072010315.

Cite this article as: Anuar KB. Rhinolith in a 37-year-old lady: a case report of an unusual presentation. *Int J Otorhinolaryngol Head Neck Surg* 2023;9:402-4.