Rhinolithiasis: A Case Report

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ABSTRACT
Rhinolith is an uncommon nasal mass in children and adults. A case of a 40 yr old female having a 7 years history of right nasal obstruction and a foul smelling right nasal discharge, which was clinically and radiologically diagnosed to be rhinolith, is being reported here. Epistaxis and nasal obstruction are its most marked symptoms. The complete resolution of the symptoms is easily achieved by the surgical removal of the rhinolith. This case highlights the importance of examining the nasal cavities in any patient with unilateral nasal obstruction symptoms.

Key Words: Rhinolithiasis, Nasal obstruction, Epistaxis

INTRODUCTION
Rhinolith, as the name indicates, is lithiasis or stone formation in the nose. The first well documented case of rhinolithiasis was reported by Barthdinin in 1654 [1]. Rhinoliths are completely or partially encrusted mineralized nasal masses- either exogenous or endogenous, depending on the origin of the nucleus on which the encrustation occurs. Dissicated blood clots, ectopic teeth and bone fragments are examples of endogenous matter. The exogenous materials include fruit seeds, plant material, beads, cotton wool and dental impression material [2]. Rhinoliths may cause rhinosinusitis, erosion of the nasal septum and the medial wall of the maxillary sinus and perforations of the palate [3]. The ethical clearance for this case presentation was obtained according to the Helsinki declaration.

CASE REPORT
A female patient BK, aged 40 years, presented to the ENT out- door department at MAMC Agroha (Hisar), with the complaint of nasal obstruction on the right side, for the past 7 years .There was a history of a yellow, thick, foul smelling, blood stained nasal discharge. There was no history which was suggestive of any foreign body in the nose, hypertension, diabetes mellitus, tuberculosis or other relevant systemic illnesses in the past. The patient belonged to a rural background and had never gone to any otolaryngologist during this tenure of seven years. She took treatment from local quacks for nasal blockade but did not have any records. On anterior rhinoscopic examination, an irregular, dark, stony mass covered with secretions was present in the right nostril, which on probing gave a gritty sensation. It was adherent to the septum and the turbinates. The nasal septum was found to be deviated on the left side. On the basis of the history, the clinical examination and imaging, a diagnosis of right side rhinolithiasis was established. The X-ray of the paranasal sinuses (water’s view) showed a radio opaque shadow in the right nostril (shown in scanned X-ray film). CT scan for the paranasal sinuses was not done due to financial constraints. Routine pre operative investigations as haemoglobin, bleeding time, clotting time, complete urine examination, total leucocyte count, differential leucocyte count, fasting blood sugar, blood urea, serum creatinine, ECG and X-ray chest-PA view were found to be within normal limits. Ethical clearance was obtained before proceeding with the case. Under general anaesthesia, nasal endoscopy was done and the presence of a large sized rhinolith was confirmed. To avoid injury to the adjacent nasal mucosa, the stone was removed in pieces from the right nostril with the aid of a nasal endoscope (scanned picture showing large size as comparable to that of the surgical blade handle). Haemostasis was achieved by a bilateral ointment soaked nasal packing. The patient did not give her consent for the laboratory analysis of the rhinolith. Postoperatively, the patient was given broad spectrum antibiotics (cefixime, 200 mg twice a day) and a systemic decongestant combination phenylephrine, cetirizine and paracetamol twice a day for five days. The nasal packing was removed after 48 hours and a bilateral gel foam was placed to prevent synechiae formation. She had an uneventful recovery after the operation. On subsequent
scan of the paranasal sinuses can accurately determine the site and evaluation. CT scan cannot differentiate a rhinolith from any other such cases and such a possibility should not be overlooked. The uncommon entities must be kept in mind while examining such a case, no blind method should be adopted to avoid the complications which follow the removal. The differential diagnosis of radiopaque nasal lesions includes a number of benign and malignant pathologies such as rhinolith, calcified polyp, ossifying fibroma, odontogenic tumour, osteoma, osteosarcoma, osteomyelitis and carcinoma [12]. Recurrence following the removal of the rhinolith has not been reported in the literature so far.

CONCLUSION

Although rhinoliths are rare, clinicians should be aware of the possibility of their incidence. It requires a high index of suspicion when dealing with nasal symptoms such as progressive unilateral nasal obstruction, rhinorrhea (usually purulent and fetid), cacosmia and unilateral nasal bleeding which favour the possibility of foreign bodies in children and rhinoliths in adults. Hence, a quick referral to local practitioners and general physicians to an otorhinolaryngologist is required for appropriate and timely management.

REFERENCES
