



Imaging Redefined

**VITAL**

**IMAGING Newsletter**

**VITAL IMAGING  
ENT  
Case Studies**

Volume 3: Issue 3

**Case Study: Rhinolith**

21 yr old with h/o foul smelling discharge. A HRCT PNS LTD study was performed at VITAL and showed a calcified lesion in the left nasal fossa abutting the nasal septum & a diagnosis of rhinolith was made with left maxillary sinusitis. This was confirmed & surgically removed with antibiotic therapy for infection.



**Imaging Redefined**

**Interesting ENT Case Studies:**

**VITAL IMAGING in ENT provides**

- ✓ HRCT PNS LTD
- ✓ HRCT Temporal Bone
- ✓ CT PNS with Contrast
- ✓ CT Neck (Plain / Contrast)
- ✓ Virtual Bronchoscopy
- ✓ Digital XRAY / Digital OPG

**Review of literature:** Rhinoliths are rare. They are calcareous concretions that are formed by the deposition of salts on an intranasal foreign body. (1) The foreign body, which acts as the nucleus for encrustation, can be either dessicated blood clots, ectopic teeth, and bone fragments examples of endogenous matter. Exogenous materials include fruit seeds, plant material, beads, cotton wool, and dental impression material. (2) **Most patients complain of** purulent rhinorrhea and /or ipsilateral nasal obstruction. Other symptoms include fetor, epistaxis, sinusitis, headache and, in rare cases, epiphora. In some patients, rhinoliths are discovered incidentally.

**Examination should include** anterior rhinoscopy and rigid endoscopy. **HRCT PNS LTD** study can accurately determine the site and size of the rhinolith and identify any coexisting sinus disease that might also require treatment. (3)

**Treatment** should include surgical removal as well as drug therapy for infection and symptomatic relief of pain and congestion. Large impacted rhinoliths can be removed piecemeal with a variety of surgical instruments. Lithotripsy has also been used to debulk large stones. (4) If access remains restricted, a submucosal resection of the nasal septum and a bony turbinoplasty will allow for further exposure and will facilitate extraction. Irrigation and suction can help remove smaller fragments. Granulation tissue at the site of contact between a stone and the nasal mucosa can be cauterized with silver nitrate. Local infection is treated with appropriate antibiotics.

References:

- 1) Polson CJ. On rhinoliths. J Laryngol Otol 1943;58:79-116.
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- 3) Hadi U, Ghossaini S, Zaytoun G. Rhinolithiasis: A forgotten entity. Otolaryngol Head Neck Surg 2002;126:48-51.
- 4) Mink A, Gati I, Szekely J. [Nasolith removal with ultrasound lithotripsy]. HNO 1991;39:116-17

(For Private Circulation Only)

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For more information, or for any questions, concerns or suggestions please do call us on Ph: 26301184/85.

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 PORTABLE DIGITAL XRAY / SONOGRAPHY / COLOR DOPPLER / ECG / 2D ECHO / PATHOLOGY**