Received: 2014.03.17
Accepted: 2014.03.20
Published: 2014.07.05

ISSN 1941-5923
© Am J Case Rep, 2014; 15: 291-293
DOI: 10.12659/AJCR.890710

Recurrent epistaxis caused by an intranasal supernumerary tooth in a young adult

Authors' Contribution:
Study Design A
Data Collection B
Statistical Analysis C
Data Interpretation D
Manuscript Preparation E
Literature Search F
Funds Collection G

E 1 **Hamed O. Al Dhafeeri**
E 2 **Abdulmajid Kavarodi**
BE 1 **Khalil Al Shaikh**
BE 1 **Ahmed Bukhari**
E 1 **Omair Al Hussain**
E 1 **Ahmed El Baramawy**

1 Department of Otorhinolaryngology (ORL), Healthpoint, King Fahd Military Medical Complex, Dhahran, Kingdom of Saudi Arabia
2 Department of Dental and Maxillofacial Surgery, King Fahd Military Medical Complex, Dhahran, Kingdom of Saudi Arabia

Corresponding Author: Hamed O. Al Dhafeeri, e-mail: drhamed71@gmail.com
Conflict of interest: None declared

Patient: **Male, 27**
Final Diagnosis: **Recurrent epistaxis**
Symptoms: **Nasal bleeding**
Medication: —
Clinical Procedure: —
Specialty: **Pediatrics and Neonatology**

Objective: **Congenital defects/diseases**

Background: Recurrent epistaxis is a common disorder among children and young adults. We report an unusual cause, intranasal supernumerary tooth causing friction with Little's area of the nasal septum.

Case Report: A 22-year-old male presented with recurrent, mild, unilateral left-sided epistaxis once to twice per month for 3 years. This usually occurred after minor nasal trauma or rubbing his nose. The patient also suffered from recurrent tonsillitis. There was neither history of blood transfusion or nasal packing, nor a history suggestive of bleeding diathesis.

Anterior rhinoscopy revealed ivory white nasal mass antero-inferiorly in the left nasal cavity touching Little's area. There was no bleeding. Nasal endoscopy showed a white cylindrical bony mass 1 cm long arising from the floor of the nose, with no attachment to the nasal septum or the lateral wall of the nose. Examination of the right nasal cavity was unremarkable.

Conclusions: Nasal teeth result from the ectopic eruption of supernumerary teeth and may cause a variety of symptoms including recurrent epistaxis. Their clinical and radiologic presentation is so characteristic that their diagnosis is not difficult. CT scan is helpful in planning management. Early extraction prevents further complications and prevents further attacks of epistaxis.

MeSH Keywords: **Epistaxis • Nasal Cavity • Tonsillitis • Tooth, Supernumerary**

Full-text PDF: <http://www.amjcaserep.com/abstract/index/idArt/890710>

Background

Recurrent epistaxis is a common disorder among children and young adults. We report an unusual cause – an intranasal supernumerary tooth causing friction with Little's area of the nasal septum.

Case Report

A 22-year-old male presented with recurrent, mild, unilateral, left-sided epistaxis once to twice per month for 3 years, which usually occurred after minor nasal trauma or rubbing his nose. The patient also had recurrent tonsillitis. There was no history of blood transfusion or nasal packing, and no history suggestive of bleeding diathesis.

Anterior rhinoscopy revealed an ivory-white nasal mass antero-inferiorly in the left nasal cavity touching Little's area. There was no bleeding. Nasal endoscopy showed a white cylindrical bony mass 1 cm long arising from the floor of the nose, with no attachment to the nasal septum or the lateral wall of the nose (Figure 1). Results of an examination of the right nasal cavity were unremarkable.

Oral cavity examination revealed a well aligned complete set of teeth for his age, normal soft palate, hard palate, and tongue. The tonsils were asymmetrical with prominent crypts and hyperemic anterior pillars.

Computed tomography (CT) scan (Figure 2) of nose and paranasal sinuses in the axial, coronal, and sagittal planes showed a dense radiopaque shadow (red arrows) originating from the hard palate into the left nasal cavity with some mucosal thickening of the left maxillary sinus. Bleeding profile was normal. Hemoglobin was 13.4 g/dl, bleeding time was 5 min, clotting time was 4 min, and prothrombin index was 100%.

Figure 1. Anterior rhinoscopy (upper left) + endoscopic view (main).

Figure 2. Pointed arrow to supernumerary tooth in sagittal (left) and in axial (right) C.T. views.

Dental consultation was requested. Dental examination gave the diagnosis of intranasal eruption of a supernumerary tooth.

The patient underwent tonsillectomy and endoscopic extraction of the supernumerary tooth with its surrounding granulation tissue under general anesthesia (Figure 3).

Postoperative follow-up at 3 months showed complete healing of the area of extraction without any oronasal fistula and the patient did not have any further attacks of epistaxis.

Discussion

Nasal bleeding is a common disorder in children and young adults that is frequently caused by irritation in the Kiesselbach

Figure 3. Intra-OP, post-extraction view of OP site (main) + extracted supernumerary tooth (upper left).

plexus, more commonly known as Little's area. Common underlying causes include local inflammatory diseases of the nose, infections, vascular malformations, tumors, and trauma [1].

Intranasal teeth present mainly in children, and are often asymptomatic [2]. They are an uncommon cause of recurrent epistaxis. Causes of intranasal teeth include trauma, infection, anatomical malformations, and genetic factors.

The prevalence of supernumerary teeth is not known and the exact eruption time is unpredictable because some of the extra teeth remain undiagnosed if they are asymptomatic [3]. The mechanism of eruption of ectopic teeth is poorly understood. One theory is that there is a defect in the migration of neural crest derivatives destined to reach the jawbones. A more plausible explanation is of multistep epithelial and mesenchymal interaction [4].

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Supernumerary teeth have an atypical crown. They grow in a vertical, horizontal, or inverted position. They may appear on the palate as extra teeth, or they may grow into the nasal cavity, as in our case [5]. The extra teeth are usually asymptomatic. However, patients may present with a variety of symptoms, including nasal obstruction, headache, epistaxis, foul-smelling rhinorrhea, external nasal deformities, and naso-lachrymal duct obstruction. They may be associated with conditions such as cleft palate. Complications of nasal teeth include rhinitis caseosa with septal perforation, aspergillosis, and naso-oral fistula [6].

Differential diagnosis of an ectopic nasal tooth includes foreign body, rhinoliths, granulomatous infections, and tumors [6]. Nasal endoscopy, panoramic radiographs, and CT scan help in the diagnosis and treatment plan. The CT findings of tooth-equivalent attenuation and a centrally located cavity are highly discriminating features that help to confirm the diagnosis [7].

Early extraction of the intranasal tooth via a conventional or endoscopic approach prevents morbidity and complications. The endoscopic approach is desirable because it is associated with less morbidity and leads to a shorter hospital stay [4].

Conclusions

Nasal teeth result from the ectopic eruption of supernumerary teeth and may cause a variety of symptoms, including recurrent epistaxis. Their clinical and radiologic presentation is so characteristic that their diagnosis is not difficult. A CT scan is helpful in planning management. Early extraction prevents further complications and prevents further attacks of epistaxis.