BJMS
Borneo Journal of Medical Sciences

CASE REPORT

Recurrent Epistaxis due to Bizarre Finding of Supernumerary Nasal Tooth

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Received: 31 May 2021

Accepted: 20 August 2021

Keywords: *otolaryngology/ ENT, oral and maxillofacial surgery, dentistry and oral medicine*

ABSTRACT

A supernumerary tooth is an additional tooth that erupted more than the normal dentition. A rarer form of a supernumerary tooth is when it erupted ectopically into the nasal cavity. Since childhood, this case report describes a 32-year-old male patient with recurrent mild nasal bleeding from his left nostril. It was never investigated seriously as the bleeding was mild and infrequent. After he was recently referred to our centre, a thorough Ear, Nose, and Throat examination was done. Direct vision with Hopkins zero-degree rigid endoscope and orthopantomogram computed tomography confirmed the provisional diagnosis of a supernumerary nasal tooth. The patient was offered surgical extraction of the tooth under general anaesthesia. He denied the surgery and decided to have regular follow up. He is maintaining good health without worsening the symptoms.

INTRODUCTION

The prevalence of supernumerary teeth ranges from 0.1 to 1% in the community (Krishnan et al., 2013). In contrast to supplemental teeth, supernumerary teeth are redundant teeth formed and the original sets of dentitions. It can be found ectopically in any region of the maxillofacial skeleton, such as within the maxillary sinus, mandibular condyle, coronoid process, orbits, palate, skin, and nasal cavity. A supernumerary tooth that appears within the nasal cavity is a sporadic pathological occurrence. Rao in 1953 was one of the earliest to report a case of a tooth in the nasal cavity

complicated with septal perforation (Kohli & Verma., 1970). The next half-century saw many authors that have acknowledged and become aware of the infrequent appearance of an ectopic nasal tooth. However, the exact prevalence of nasal tooth is still unknown and will be a demanding task to achieve because of the unpredictable time of appearance and its isolated nature, eluding its diagnosis.

CASE PRESENTATION

A 32-year-old gentleman was referred to the otorhinolaryngology clinic with a history of epistaxis for about eight years. Initially, the patient ignored the symptoms as it was mild bleeding and, most of the time, self-limiting or stopping by general measures like pinching the nostril for 10-15 minutes at home. Sometimes he has visited the nearby clinic and was treated with nasal decongestants and antibiotics. His symptoms recurred in the same way even after he finished the course of medicine. No significant improvement was observed.

Clinically he appears relatively fit without any stigmata of plausible diseases. A suspicious whitish and hard bony mass was found arising from the anterior third of the floor of the nasal cavity, as seen via the Hopkins zero-degree rigid endoscope (Figure 1). A full ear, nose, and throat (ENT) examination was performed without any other significant findings.

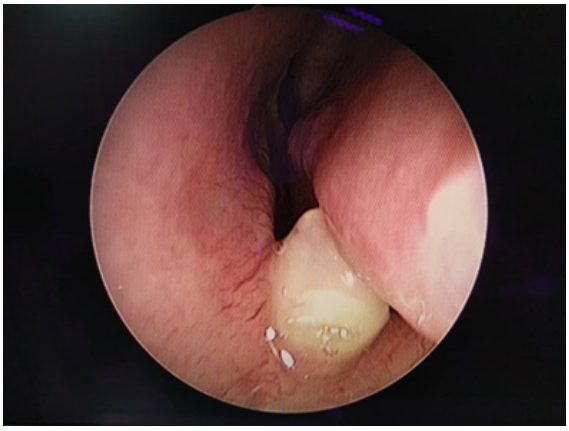

Figure 1 Intranasal tooth seen at the floor of the nasal cavity

All basic laboratory blood test was done and was within the standard limit. A radiograph of nasopharynx lateral view was done to exclude nasopharyngeal pathology, and the finding was expected. Radiograph of paranasal sinuses occipitomental view shows a hyperintense lesion within the left nasal cavity. Orthopantomogram (OPG) shows an erupted supernumerary tooth in the left nasal cavity (Figure 2). Axial view of a computed tomography (CT) scan shows a hyperintense lesion within the left nasal cavity (Figure 3).

Figure 2 An OPG revealing an erupted supernumerary tooth (arrow) in the left nasal cavity

Figure 3 Axial view of a CT scan showing a hyperintense mass within the left nasal cavity

The differential diagnosis of the supernumerary nasal tooth includes radiopaque nasal foreign body, rhinolith, benign tumours like osteoma, enchondroma, and dermoid, intranasal inflammatory lesions with calcification, calcified polyps, malignant tumours such as chondrosarcoma and osteosarcoma. We clinically excluded all the differential diagnoses by taking a careful history, thorough clinical examination, necessary laboratory investigations, and required imaging. Radiographs of a paranasal sinus, CT scan of paranasal sinuses, and OPG findings are highly suggestive features that help to confirm the diagnosis. We concluded that the mass was likely an erupted tooth. Thus, we have diagnosed the case as a supernumerary nasal tooth.

An endoscopic endonasal extraction was planned. The patient was counselled for surgical extraction of the tooth under General Anaesthesia (GA); however, he declined. We have prescribed the patient intranasal steroid spray and nasal douche.

The patient was subsequently given a regular follow-up for surveillance. The gentleman is currently healthy without worsening of the symptom. He was planned for follow-up every six months or whenever necessary, like if there is severe epistaxis.

DISCUSSION

Nasal bleeding is a common complaint in children and young adults. Krishnan et al. (2013) presented a case of a young teenager with recurrent epistaxis resulting from a supernumerary tooth. Occasionally, adults experience mild epistaxis, and a more severe form warrants suspicion of a more serious underlying problem. Common causes of epistaxis include trauma, tumours, local inflammatory disease of the nose, infections, and vascular malformations (Lee, 2006). Another important reason for recurrent epistaxis is a foreign body within the nasal cavity like an organic matter like an intranasal tooth.

A supernumerary tooth can be an incidental finding or may be presented with symptoms of nasal obstruction, epistaxis, foul-smelling nasal discharge, or rarely a facial deformity (Al Dhafeeri et al., 2014; Chen et al., 2002). Chen et al. (2002) reported 3 cases complaining of nasal obstruction and found out supernumerary tooth was the likely cause. Various theories were postulated, including a developmental reversion of an extinct primate initially with three pairs of incisors, overgrowing of dental lamina arising from the permanent tooth, trauma or overcrowding during the eruption of deciduous teeth (Chen et al., 2002). Currently, its aetiology remains a debate among experts. Complications such as infective sinusitis, septal perforation, and oro-nasal fistula may arise If it remains untreated.

Diagnosis of a supernumerary tooth can be made clinically by direct vision using endoscopic evaluation. Radiographic imaging such as X-ray and CT scans can establish a more precise diagnosis.

Many authors suggest the removal of the tooth to avoid the development of complications. The tooth may act as a foreign body inside the nasal cavity and become a nidus for bacterial growth leading to infection. The optimal time for extraction is following the complete eruption of the permanent roots to avoid injury during its development. With the current advancement in endoscopic surgery, extraction of the supernumerary nasal tooth via endoscopy provides better illumination, clear visualization, prevents unwanted mucosal injury, and precise dissection while retaining the surrounding structures (Kim et al., 2003; Lee, 2001; Sanei-Moghaddam et al., 2009). Conservative management includes regular surveillance and detection of complications. Ultimately, the treatment of Supernumerary teeth should be discussed with the patient to provide optimal therapy.

CONCLUSION

Recurrent epistaxis not responding to adequate treatment should refer to the ENT specialist to be investigated. The endoscopic examination must be included in the clinical ENT examination. In case of suspected impacted foreign body in the nose, supernumerary nasal tooth to be excluded. The supernumerary nasal tooth should be considered as a cause of epistaxis in clinical practice.

CONFLICT OF INTEREST

The authors declare that they have no competing interests in publishing this case.

CONSENTS

Written consent was obtained from the patient to publish the case. A copy of the written consent is available for review by the Editor-in-Chief.

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