

CASE REPORT

ECTOPIC SUPERNUMERARY NASAL TOOTH

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ABSTRACT: Supernumerary nasal tooth are not rare. Their incidence is around 3% in general population. They present with varying symptoms. The clinical manifestations of intranasal teeth are quite variable; however, intranasal teeth can be an incidental finding during routine examination in patients without nasal discomfort. Our patient had nasal obstruction as the main symptom. The intranasal tooth was removed endoscopically.

KEYWORDS: Ectopic nasal Tooth, Nasal Endoscope.

INTRODUCTION: Ectopic eruption of teeth into the nasal cavity is a rare phenomenon.¹ Nasal teeth are a rare form of supernumerary teeth.¹ The incidence of hyperdontia or supernumerary teeth affects 3% of the general population.² There is a 3: 1 male predominance. Ninety percent of cases occur in the anterior maxilla.² Reported sites include the nasal cavity, maxillary sinus, palate, mandibular condyle, coronoid process, orbit or through the skin.² Ectopic teeth may be permanent, deciduous or supernumerary.³ They have an atypical crown and they may be in a vertical, horizontal or inverted position.¹ We report a unique case of intranasal ectopic tooth eruption into the nasal cavity which caused significant nasal symptoms in an otherwise healthy patient which was removed endoscopically.

CASE REPORT: A 25yr old woman presented to ENT & HNS OPD with the complaints of right sided nasal obstruction and mass in right nasal cavity since 6 months. No history of bleeding from nose, foul smelling nasal discharge, pain in the nose, facial pain or headache. No history of loss of smell left sided nasal obstruction or watering of eyes. No history of trauma or weight loss. Anterior rhinoscopy revealed a solitary, whitish mass about 1 x 1.5cm in the floor of right nasal cavity just behind the vestibule. It was hard, insensitive to touch and pain, and was free from septum and lateral nasal wall. Examination of oral cavity showed normal hard palate and no missing tooth. No palpable neck nodes.

Patient was subjected to orthopantomogram (OPG) (Fig. II) and CT scan of nose and paranasal (Fig. I) sinuses. OPG revealed normal dentition with no missing teeth. CT scan showed a 1cm x 2cm radio opaque mass located in the floor of right nasal cavity between septum and inferior turbinate. No evidence of erosion of hard palate or septal perforation. A good cleavage was maintained between the mass and septum, mass and lateral wall of the nose.

Routine hemogram, urine examination, ECG and chest X-Ray were within normal limits. Patient was taken up for endoscopic excision under monitored local anaesthesia. Good infiltration with 2% xylocaine with adrenaline was given around the mass and deep in the floor. With Freer's elevator mass was mobilized around its base from the floor of the nasal cavity and was extracted in toto using nasal forceps. On palpation, the underlying bony palate was intact. Hemostasis was

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maintained. Antibiotic with steroid pack placed in right nasal cavity. The suspected tooth was sent for dental opinion and was confirmed to be a supernumerary tooth and the same was confirmed by histopathology (Fig. III).

DISCUSSION: Ectopic eruption refers to teeth that have erupted in an abnormal location. Ectopic teeth are commonly seen in the palate and maxillary sinus, but have also been reported in the mandibular condyle, coronoid process, orbit, and nasal cavities. Supernumerary teeth develop either from a third tooth bud that arises from the dental lamina near the permanent tooth bud or possibly from splitting of the permanent bud itself. Another theory is that their development is a reversion to the dentition of extinct primates, which had three pairs of incisors. Although the cause of ectopic growth is not well understood, it has been attributed to obstruction at the time of tooth eruption secondary to crowded dentition, persistent deciduous teeth, or exceptionally dense bone. Other proposed pathogenic factors include a genetic predisposition; developmental disturbances, such as a cleft palate; rhino genic or odontogenic infection; and displacement as a result of trauma or cysts.¹

The most common location is the upper central incisor area (mesiodens), followed by the maxillary third molar (peridens) and mandibular bicuspid areas⁵. The teeth may be asymptomatic or may cause nasal obstruction, facial pain, headache, epistaxis, foul-smelling rhinorrhoea, external nasal deformities, nasolacrimal duct obstruction.¹ Rhinitis, septal perforation and oronasal fistula have also been noted.¹

There are several conditions like Gardner's syndrome characterized by multiple impacted supernumerary teeth, polyps of the large intestine, osteoma of the bones, multiple sebaceous cysts of the skin.⁵ Cleidocranial dysostosis characterized by hyperplasia of the clavicle, delayed and defective dentition and many supernumerary teeth in maxilla and mandible.^{5, 6} Probably the most prominent oral manifestation is the number of supernumerary teeth present, which at times simulates a third dentition.⁷

The differential diagnosis should include a foreign body, rhinolith, inflammatory lesion due to syphilis, tuberculosis or fungal infection with calcification, benign or malignant tumours, exostosis, odontomas, osteomas or cystic lesions. Pre-operative radiologic examination, CT scan may guide diagnosis and management.

Nasal teeth result from the ectopic eruption of supernumerary teeth and may cause a variety of symptoms. They have a characteristic clinical and radiological presentation and hence can be diagnosed with ease. CT scan helps to know the extent and to plan for treatment. Surgical (Endoscopic) excision of the mass in Toto is the treatment of choice.

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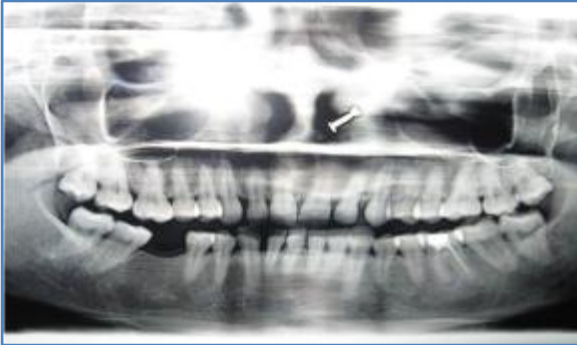


Fig. I: CT PNS sagittal cut



Fig. I: CT PNS axial cut

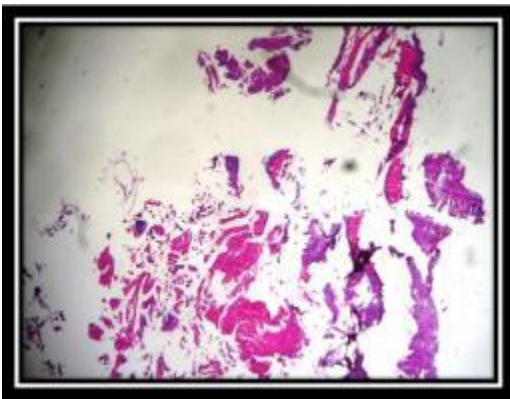


Fig. II: Orthopentogram



Fig. III: Histopathology

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