Ectopic Supernumerary Nasal Tooth:
A Clinical Case Report

Abstract
The incidence of ectopically erupting teeth has increased in these days. Teeth erupting into the nasal cavity is however a rare phenomenon. This is a clinical case report of an ectopic supernumerary tooth which was found in the nasal cavity. The clinical and radiographic findings of this case, its possible etiology, complication, diagnosis and treatment were discussed.

Key words: Ectopic eruption; supernumerary teeth; nasal teeth.

The detection of ectopic teeth that appear in places other than that of the normal teeth is increasing. This may be due to the greater use of panoramics, CT scans, MRI and due to the increased awareness and public interest in their dentition and oral health. Ectopically erupting teeth may appear beside the orbit, chin, maxillary sinus, palate and the nose. There are several conditions that may lead to the ectopic eruption of teeth. These may include developmental disorders such as cleft palate cases, trauma causing displacement of the teeth, cysts, maxillary infection, crowding, genetic factors and high bone density.

Theses ectopic teeth may be permanent, deciduous or supernumerary. Most cases of supernumerary teeth are asymptomatic and usually discovered with routine examination and radiographs. Sometimes ectopically erupted teeth cause epistaxis, rhinitis, septal abscess, septal perforation, pain in the philtrum area, discomfort during deglutition and speech. They can further cause delay in the eruption of teeth or future malalignment of teeth, external nasal deformities and nasolacrimal duct obstruction.

The nasal teeth are a rare form of supernumerary teeth. Smith et al. in 1979 identified 27 well documented cases of intranasal teeth. Pracy et al., Spencer and Couldery and Johnson listed four instances of this abnormality. Chen et al. in 2002 reported two cases of intranasal teeth that were endoscopically removed. In 2008, Subramaniam et al. reported a case in which a patient with missing upper lateral incisor was found in the nasal cavity.

Case Report
A 27-year-old male attended the oral surgery department in Alexandria Dental Research Center complaining of pain in the nose, swelling and discomfort related to the area of the right canine eminence. On pressure, pain was referred to the nose with headache and the patient felt that there is something blocking his nose (an intranasal mass). Patient’s dental examination revealed a complete set of teeth without any oral disease nor history of maxillofacial trauma or surgery. Patient’s general medical status was reviewed and found adequate.

Radiographic examination of the oral cavity including periapical, occlusal and panoramic films showed that there is an impacted supernumerary tooth like structure high above the apex of upper right canine (Figs. 1,2). It gave the image of an impacted tooth in the palate, but the patient with certain movements, clinically showed the tip of the supernumerary tooth in the floor of the nose (Fig. 3).

The definitive treatment for the supernumerary tooth is the surgical removal of the tooth, even if it were asymptomatic. A combination of infra orbital block anesthesia and infiltration were given to the patient. A blind dissection around the tooth like structure was performed to expose the whole crown (Fig. 4). No incisions were used during this procedure. The mass was held and extracted from the right nostril using a curved hemostat (Fig. 5). Local haemostatic was applied into the nose to stop bleeding.

With visual examination, the mass appeared as a tooth having a crown and a root (Fig. 6). Microscopically, it was composed of dentine and covered by well organized enamel and the central region contained pulp tissue.

The patient was asked for follow up after 3 days, where by then all preoperative signs and symptoms had completely disappeared. The patient was instructed to attend for follow up every 6 months.
Ectopic and supernumerary teeth may erupt in different sites. The incidence of supernumerary teeth usually affects 0.1-1% of the population. The prevalence is higher in male children and vegetarians. Heredity may play a role for the increased incidence in some families.

Various theories have been proposed to explain the presence of supernumerary teeth. The first theory is the excessive growth of the dental lamina. The second theory is that the tooth germ may undergo dichotomy. The third theory states that these teeth are derived from clumps of epithelium that remained after the breaking up of the tooth band and became activated to tooth formation.

The diagnosis of the nasal teeth depends on the clinical and radiographic examination. When an extra tooth is in the nasal cavity, the procedure is usually a minor operation. When a tooth has a bony socket in the floor of the nose, it may be extremely difficult to extract. If the patient is still in the mixed dentition period it is better to delay the surgical interference until the complete eruption of the permanent teeth and formation of their roots. Once these teeth are extracted, they appear as normal teeth in structure and appearance.

The differential diagnosis of nasal teeth includes radiopaque foreign body, rhinolith, inflammatory lesions due to syphilis, tuberculosis, or fungal infection with calcification, benign tumors including hemangioma, osteoma, calcified polyps, enchondroma, dermoid cyst, and malignant tumors such as chondrosarcoma and osteosarcoma.

More research with several investigations must be done to have statistical data about the actual percentage of ectopic teeth in the nose in Egypt. More research on ectopic teeth must be done to know the actual reason for their presence and to know why they appear in that specific place.

References