

Supernumerary tooth in the maxillary sinus: Case report

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Abstract

The ectopic development of teeth has been reported in many locations including the nasal cavity, maxillary sinus and the chin. Ectopic teeth may be permanent, deciduous or supernumerary. A case is presented in which a supernumerary tooth erupted into the maxillary sinus of an 11 year old boy.

Key words: Ectopic eruption, supernumerary tooth, maxillary sinus, case report.

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Introduction

Ectopic eruption of a tooth into the dental environment occurs commonly whereas ectopic eruption of a tooth in other sites is rare.¹ Those that have been reported include the nasal cavity,²⁻⁵ chin⁶ and maxillary sinus.^{1,7} Theories explaining the aetiology include developmental disturbances such as cleft palate and teeth displaced by trauma or cysts, maxillary infection, genetic factors, crowding and dense bone.^{4,5,8}

Ectopic teeth may be permanent, deciduous or supernumerary.⁴ Most cases of supernumerary teeth are asymptomatic and are usually found during routine clinical or radiological investigations.¹ With the increased use of panoramic radiographs there is likely to be a rise in the incidence of ectopic teeth detected in the maxillary sinus.⁷ The definitive treatment is surgical removal of the tooth.^{1,7} Asymptomatic teeth should also be removed or at least followed radiographically.⁸

A case is presented in which a supernumerary tooth erupted into the maxillary sinus. To the authors' knowledge, no such case has been reported in the dental literature.

Case report

An 11 year old male child was referred to the Department of Paedodontics. He occasionally complained of pain on the left side of his face and mucopurulent rhinorrhoea. On examination of the teeth, it was seen that the patient was in the mixed dentition stage and he had no dental caries. Radiographic examinations which included a panoramic radiograph (Fig. 1) revealed a supernumerary tooth in the left maxillary sinus. It was thought that the pain and mucopurulent rhinorrhoea were because of this tooth so the patient was sent to the Ear, Nose and Throat (ENT) Clinic. Clinical examination of the ear, nose and throat did not reveal any abnormality so a Waters' projection radiograph was taken. The radiogram also showed the presence of a supernumerary tooth in the left maxillary sinus (Fig. 2). Since the patient was then asymptomatic it was decided that he be recalled



Fig. 1. – Panoramic radiograph of the tooth in the left maxillary sinus.

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Fig. 2. – Waters' projection radiograph, revealing the supernumerary tooth.

every six months. He has been on regular follow-up for the last two years and the tooth continues to remain asymptomatic. It must be removed surgically if it becomes symptomatic.

Discussion

Ectopic and supernumerary teeth occur in a variety of sites.⁴ Teeth have been reported erupting into the maxillary sinus,^{1,7} nasal cavity²⁻⁵ and chin.⁶ Eruption of a tooth into these sites is rare.⁴

The nasal fossa is one of several sites in which ectopic teeth may be found.^{3-5,8} In many cases no aetiological factors can be identified.^{4,8}

In 1979 Smith *et al.*⁸ identified 27 well-documented cases of intranasal teeth.^{3,5} Two further cases were added to that list.¹ After that, Pracy *et al.*,³ Spencer and Couldery⁵ and Johnson⁹ listed four instances of this abnormality.^{3,4}

In 1987, Gadalla⁶ presented a case in which a patient complained of two teeth that had erupted through her chin.

Elango and Palaniappan¹ described an upper third molar in the roof of the maxillary sinus. As the patient was asymptomatic, he was recalled for regular follow-up.

In 1995 Di Felice and Lombardi reported another case of an ectopic third molar in the maxillary sinus.⁷

Supernumerary teeth occur about one in 1000 of the population. They usually occur in the upper incisor area but can also arise in the nasal cavity.¹ In the present case, a supernumerary tooth was found in the left maxillary sinus area of the patient. Definitive treatment was the surgical removal of the tooth, but as the tooth was asymptomatic, the ENT specialists decided to review it every six months.

Conclusion

A supernumerary tooth was described in the left maxillary sinus of an 11 year old boy. The tooth was asymptomatic so it was not removed surgically. The ENT specialists recommended close radiographic follow-up every six months.

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