Unusual Case of Bilateral Impacted and Inverted Maxillary Canines

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A 15-year-old male patient reported to the Department of Pedodontics and Preventive Dentistry for routine dental examination. On clinical examination, he had proclined maxillary incisors, and there were over retained deciduous maxillary canines and deciduous maxillary second molars. He was sent for radiographic investigation for the location and stage of development of permanent successors. The orthopantomograph revealed an interesting finding wherein the permanent maxillary canines were oriented upside down (inverted) and located between the maxillary antrum and the lateral wall of the nasal cavity (Figure 1). It was also noted that root formation of inverted maxillary canines was almost complete indicating that they were impacted.

Maxillary canines are called as "corner stones" of the oral cavity and are most important teeth esthetically and functionally. They are known to be second most frequently impacted teeth after the third molars. The cause for impaction is unknown but great variation is seen both in the vertical and horizontal inclination and position. It is now being predicted that a deficiency in the cell signaling process of one tooth or more adjacent teeth, at an early stage, could cause the tooth buds to move in the wrong direction leading to transposition of the tooth germ. In the present case, since the patient did not have any complaints it was best to leave the condition as it was and advised for long-term periodic radiographic evaluation. Orthodontic treatment can be carried out for the proclination of maxillary incisors with a conservative approach.

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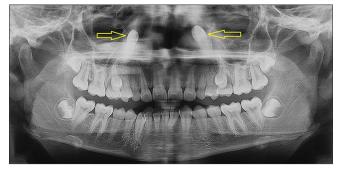


Figure 1: Orthopantomograph showing both maxillary canines, which are inverted

Points to Ponder

- Inverted canine refers to the orientation of the tooth, which is upside down
- Maxillary canines develop in the canine fossa, which is located lateral to the wall of the nasal cavity and medial to maxillary antrum
- Maxillary canines are the second most frequently impacted teeth after third molars but inverted and impacted maxillary canines are very unusual.

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