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BILATERAL COMPLETE ROTATION OF MAXILLARY LATERAL INCISORS WITH DENS INVAGINATUS

A healthy 11-year-old Chinese girl was examined at Kaohsiung Dental School in May 1990. Both the medical and dental histories were unremarkable, and there was no evidence of dental anomalies in her family.

Clinical examination revealed a well-maintained dentition with good oral hygiene. However, bilaterally the permanent maxillary lateral incisors were rotated through 180 degrees (Figs. 1 and 2). The crown of the left lateral incisor had a crest resembling an atypical talon cusp over the labial surface, whereas the right lateral had two accentuated ridges with a deep central pit on its labial surface. On further questioning the patient stated that both incisors had been completely rotated since eruption.

Periapical radiographs showed both permanent maxillary lateral incisors to have dens invaginatus (Fig. 3); canine was also impacted.

We are unaware of previous reports of symmetric complete rotation of maxillary incisors. Although the exact cause of the anomaly has not been established, its presence from the time of eruption supports a scenario involving genetic influence. This is consistent with the opinion of Pindborg[1] that rotations are genetically influenced rather than necessarily caused by insufficient space in the dental arch.

With Ohlers' classification[2] of dens invaginatus, the right permanent lateral incisor would be a type 2, and the left one a type 3.

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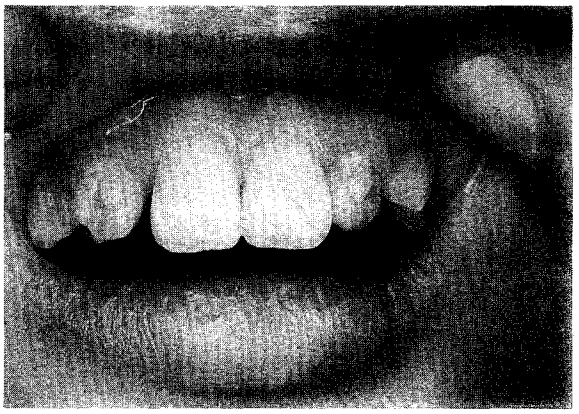

Fig. 1. Labial view.

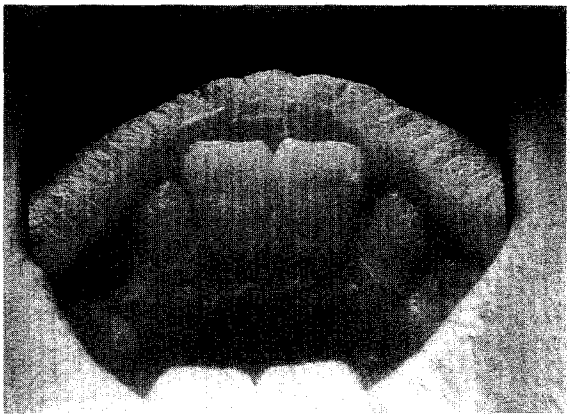

Fig. 2. Lingual view.

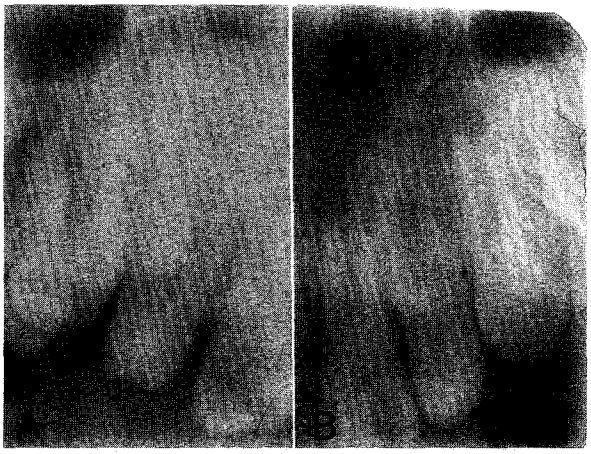

Fig. 3. Periapical radiographs. **A**, Right; **B**, left.

REFERENCES

1. Pindborg JJ. Pathology of the dental hard tissues. Philadelphia: WB Saunders, 1970:58-64.
2. Ohlers FA. Dens invaginatus (dilated composite odontoma). I. Variations of the invagination process and associated anterior crown forces. ORAL SURG ORAL MED ORAL PATHOL 1957; 10:1202-18.