Gemination

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DESCRIPTION

A 34-year-old male patient attended the outpatient department for a routine dental check-up. On intraoral examination, large anomalous double teeth were present in relation to the right maxillary lateral incisor (figure 1A). The crowns of the involved teeth were united except for a prominent groove in between (figure 1B). Both crowns resembled the shape of a lateral incisor but were smaller than normal in size (figure 1C). Intraoral periapical radiographs of the region revealed that the teeth involved had two evident roots and pulp chambers and were fused at the apex (figure 1D). Thus, a diagnosis of gemination was made.

Gemination may be defined as the formation of two crowns from a single tooth, while in fusion, two different teeth unite together as one, and on counting the teeth, there is one less than normal. Fusion is believed to occur due to physical force or pressure on the adjacent tooth germ, which leads to their contact and fusion before calcification.¹ Although the aetiology of gemination is unknown, there is some evidence that the condition has a

familial tendency. Gemination is more prevalent in the anterior maxillary region, whereas fusion is more commonly found in the anterior mandibular dentition.²

Learning points

- ▶ Gemination is the formation of two crowns from a single tooth, while fusion occurs when two different teeth unite as one.
- ▶ Double teeth may also be a part of syndromes such as achondrodysplasia and chondroectodermal dysplasia.

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Competing interests None.

Patient consent Obtained.

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Figure 1 A 34-year-old male patient presenting with gemination in relation to the right maxillary lateral incisor. (A) Intraoral view showing the double teeth in relation to the right maxillary lateral incisor. (B) Lateral intraoral view showing the double teeth with a prominent groove in between. (C) Occlusal view showing the double teeth, note that the tooth count increases by one. (D) Intraoral periapical radiograph revealed that the teeth involved had two evident roots and pulp chambers and were fused at the apex.

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