

# Crown Dilaceration – a clinic case

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## INTRODUCTION

Crown dilaceration of permanent teeth occurs due to the non-axial displacement of the already formed hard tissue portion of the developing crown at an angle to their longitudinal axis due to trauma to the primary predecessor. <sup>1,2,3</sup> The prevalence of crown dilaceration constitutes 3% of total injuries in developing teeth and is usually because of intrusion or avulsion of primary predecessors. <sup>1,2</sup> Crown dilacerations with palatal angulation of the crown occur most commonly in maxillary incisors, whereas labial angulation is more common in mandibular incisors. <sup>1,2,3</sup>

The final diagnosis is made after a full clinical and radiographic exam and a careful report of medical history by the dentist. <sup>3</sup>

The aim of the presente work is to report a case that highlights one the possible disturbance caused by trauma to the primary teeth: crown dilaceration.

## DESCRIPTION CLINICAL CASE

- Female, 6 years old;
- Reason for consultation: assimetry of the central lower incisors;
- History of trauma to the anterior mandibule at the age of 2;
- Clinical examination revealed assimetric of the two lower central incisors. The crown of the 41 and 31 didn't present decay or shape alterations;
- Radiographic examination confirmed the diagnosis of coronary dilacerations on the mandibular left central incisor;
- Treatment plan: 1 - Teeth eruption follow-up; 2 - Preventive treatment of dental caries; 3 – After complete eruption, evaluation of the best treatment option.



Fig. 1 – Intra-oral photo



Fig. 2 – Dilaceration coronary tooth 31

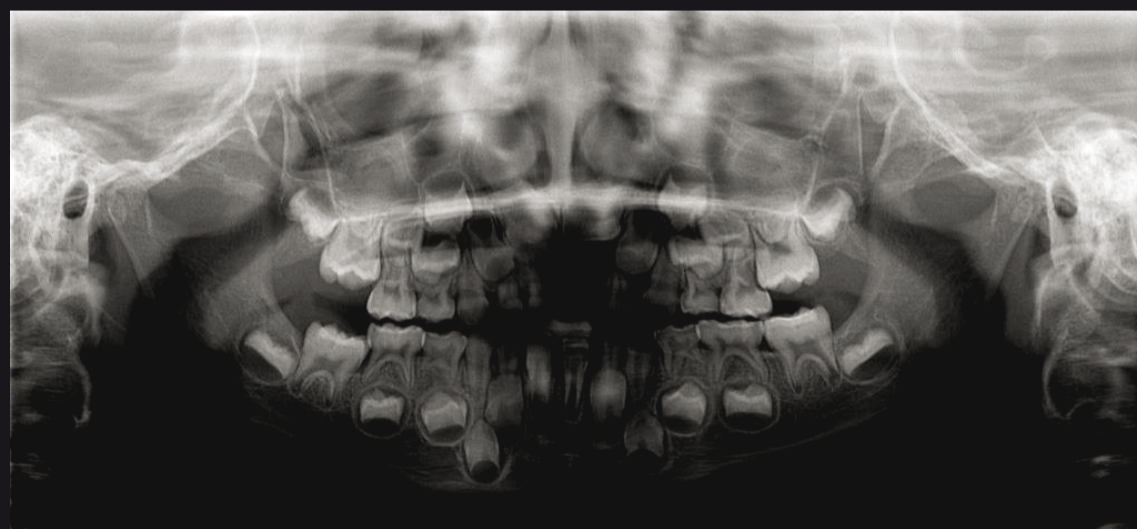


Fig. 3 – Radiography panoramic

## DISCUSSION/CONCLUSION

Even though coronary dilaceration is not that common, it should not be underestimated. Clinical features of dilaceration usually include longer retention of the primary predecessor tooth, possible apical fenestration of the buccal or labial cortical plate, carious lesions along the junction between the dilacerated and non-dilacerated portions (probably due to the greater accumulation of biofilm in this region) as well as the non-eruption of the responsible tooth<sup>1</sup>. So, a long term follow-up is crucial until the full eruption of the permanent teeth as well as preventive care to reduce the risk of caries<sup>3,4</sup>. Usually, to treat caries, the treatment only requires direct restorative procedures but depending on their extension and severity, endodontic treatment can be necessary<sup>1,2,3,4</sup>. Orthodontic treatment may be necessary when the eruption of the dilacerated tooth didn't occur<sup>1,2,3,4</sup>. Treatment should start as soon as possible, involving an interdisciplinary approach. An early diagnostic and a long-term follow-up are extremely important, in order to avoid the loss of the dilacerated tooth<sup>1,3</sup>.

**Keywords:** Coronary dilaceration; dental trauma; primary teeth; central lower incisor; morphological disturbances; odontopediatrics.

### References:

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