Intracoronal radiolucency in an incompletely erupted permanent molar with a diagnosis of pericoronitis

Importance of radiographic examination

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Because of clinical signs and symptoms, a diagnosis of pericoronitis in a partially erupted, partially impacted first molar was made. A more thorough diagnosis was made with the help of a periapical radiograph that showed caries and thus revealed an irreversible pulpitis. Appropriate treatment was the result. (Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1998;85:461)

A 6-year-old boy complained of pain in an incompletely erupted left first mandibular molar. The patient had undergone extraction of several carious primary teeth 4 months earlier. Clinical examination revealed swelling and inflammation of all of the soft tissue overlying the left first mandibular molar except the exposed mesio-buccal cusp tip. The initial diagnosis was pericoronitis of the left first mandibular molar.

Systemic treatment was prescribed; it included 20 mg/kg of amoxycillin every 8 hours and 5 mg/kg of paracetamol every 6 hours for 5 days. The pain recurred 2 weeks later. A periapical radiograph revealed a radiolucency within the crown of the incompletely erupted tooth (Fig. 1). The radiolucent area involved a large portion of the tooth structure and appeared to communicate with the mesial pulp horn, which suggested deep caries with possible pulp exposure. Signs and symptoms indicated irreversible pulpitis. Root development was incomplete.

After surgical exposure no defects in the occlusal surface were evident. However, unroofing of the enamel revealed extensive caries. The lesion communicated with a vital pulp, which confirmed the diagnosis of irreversible pulpitis. Vital pulp therapy was performed to maintain the viability of the radicular pulp and thus permit continued root/dentin formation.1,2 The endodontic treatment decided on was apexogenesis; partial pulpotomy was performed with calcium hydroxide.

The early caries of the left first mandibular molar that resulted in an intracoronal radiolucency was in accord with the high incidence of caries in the patient’s primary teeth. Apparently bacterial plaque had become established in the occlusal via the opening in the gingiva.

Because of the pain, an erroneous diagnosis was made and incorrect treatment was carried out.

This case illustrates the importance of careful radiographic and clinical examination for the sake of obtaining a correct diagnosis and deciding on an appropriate treatment plan.

REFERENCES


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