Inflammatory radicular cyst clinical case

Translational Research and Innovation in Human in health Sciences

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introduction: Radicular inflammatory cyst associated to primary teeth is an injury resulting from pulpal necrosis or pulpectomy treatment. Commonly, the cyst involves the apex affected tooth and represents a prevalence of 0.5%-3.3% (1, 2). The majority of patients are affected in first decade and in the early second decade of life, the girls have higher incidence than boys, as well as the mandible when compare to the maxilla (1, 3, 4). Is usually an asymptomatic lesion detected by routine radiography (2).

Purpose: The aim of this study is to present a clinical case of a young patient, who was diagnosed, by radiography a radiolucent image associated to a primary tooth with pulpectomy treatment, with a follow-up treatment of six months.

Clinical History

- Seven-year-old girl
- Chief complaint “to treat a carious lesion on the 52, primary incisor tooth” (sic);

Diagnosis

- Intra oral exam:
  - Carious lesion on the 52
  - Mixed dentition
  - Buccal cortical plate associated a first right lower primary molar – 84

➢ First right lower primary molar had been restored with intermediate restorative material, and had no mobility and no pain. Panoramic and periapical radiographic revealed pulp therapy, well-defined unilocular radiolucency involving the interradicular area and a delay in the development of the successor tooth - 44.

Fig. 1, 2. Pretreatment diagnosis exams.

Fig. 3. Initial Intraoral photo.

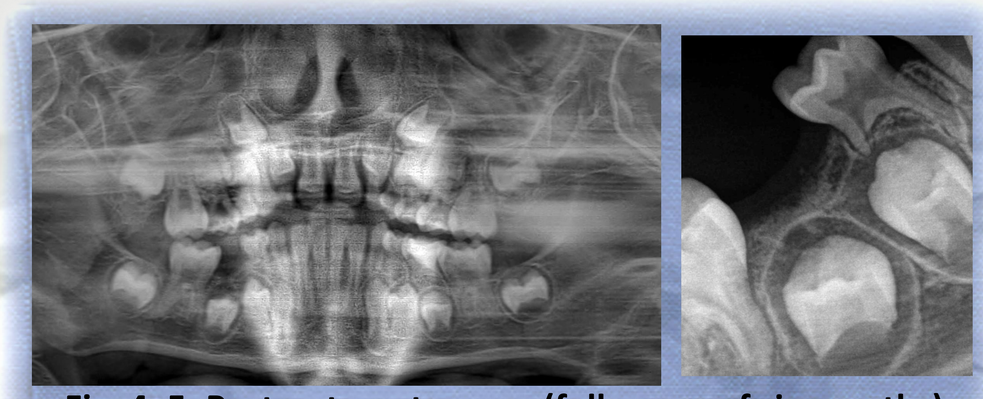

Fig. 4, 5. Postreatment exams (follow-up of six months).

Fig. 6. Intra oral photo (follow-up of six months)

Treatment Procedures

The cyst was enucleated along with the involved primary tooth and was sent for histopathologic examination. Surgical exploration confirmed the non-association of the cyst to the successive permanent tooth.

Discussion:

A relationship between intracanal medicaments used for pulp therapy and intraepithelial inclusions in the cystic walls, which might provide a site for continuing antigenic stimulation had been proposed (3). The clinical findings in the major of these cases are: expansion of buccal cortex of the affected tooth, delayed permanent tooth development, radiolucent unilocular lesion with smooth and well-defined borders and extending in the periapical area of primary tooth (1) which match with the clinical findings on the presented case.

Conclusion

We conclude that pulp therapy of primary teeth does not always have good prognosis and is affected by many factors. Long term follow-up of these treatments is essential because absence of clinical symptoms does not mean that these treatments are healthy (3, 5).

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