Marsupialisation: a treatment modality of a dentigerous cyst

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DESCRIPTION

Dentigerous cysts or follicular cysts may be developmental or inflammatory in origin. Treatment of inflammatory cysts should be performed in a conservative manner without causing undue damage to the succedaneous tooth.¹

This is a case report of a large inflammatory dentigerous cyst that was managed conservatively by marsupialisation.

A 13-year-old boy presented with painless swelling in the area of the left lower back tooth for 1 month. On extraoral examination, a slight buccal bulge that was hard on palpation was seen. Intraoral examination revealed a grossly decayed 75. An orthopantomogram X-ray was advised, which revealed a well-defined unilocular radiolucency in relation to 75 (figure 1). The radiolucency also involved unerupted 35 (figure 2). A provisional diagnosis of inflammatory dentigerous cyst was made. Marsupialisation of the cyst was planned to prevent any undue damage to the succedaneous tooth. Routine blood investigations were advised, which showed normal values.

75 was extracted under local anaesthesia. A thick, straw coloured fluid was drained during the procedure. Tissue from the cavity was sent for histological

Figure 3 Histological examination of lesion confirming dentigerous cyst.

examination, which confirmed an inflammatory dentigerous cyst (figure 3). Buccal and lingual cortical plates were compressed and left open for drainage. The patient was prescribed with antibiotics and analgesics and discharged after giving instructions.

Follow-up was carried out after 1 week, 1 month (figure 4), 3 months (figure 5), 6 months (figure 6) and 9 months (figure 7).

After 9 months, 35 erupted in the oral cavity with complete bone healing (figure 8). The patient was advised orthodontic consultation for maligned teeth.

Figure 1 Orthopantomogram showing unilocular radiolucency in 75.

Figure 4 Follow-up after 1 month.

Figure 2 Radiolucency involving 35.

Figure 5 Follow-up after 3 months.

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Figure 6 Follow-up after 6 months.

Figure 7 Follow-up after 9 months. An orthopantomogram showing complete eruption of 35.

Competing interests None.

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Figure 8 Clinically erupted 35.

Learning points

- ▶ Dentigerous cysts are the most common of all developmental cysts of odontogenic origin and account for 20–24% of all jaw cysts.² They are more frequently seen in males and more common in the mandibles.
- ▶ Inflammatory dentigerous cysts occur in immature permanent teeth due to the spread of inflammation from overlying non-vital primary teeth.
- ▶ Marsupialisation of an odontogenic cyst has an advantage over enucleation as cystic lining has an inherent tendency to contract (due to myofibroblast) after release of cystic content and allow endosteal bone formation to take place.³

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