



INTRODUCTION

The mandibular infected buccal cyst (*Stoneman and Worth 1983*) is a rare type of inflammatory odontogenic cyst. It occurs in children aging from about 6 to 11 years (*David et al. 1998*). It is an uncommon lesion associated with a partial eruption of the permanent mandibular first or second molar. It typically presents on the buccal aspect of the affected tooth (*Thikkurissy et al. 2010*).

The World Health Organization (WHO) has included this lesion in their Histological Typing of Odontogenic Tumours. In the category of "inflammatory cysts", the Classification in the Second Edition in 1992 makes provision for the paradental (inflammatory collateral, mandibular infected buccal) cyst (*Kramer et al. 1992*).

Other authors argue for the term buccal bifurcation cyst, because the lesion is site- and age- specific (*Pompura et al. 1997*).

CASE REPORT

A 9-year-old otherwise healthy boy was referred by an orthodontist to our department. He presented with a local suppuration buccal from his lower left first molar (tooth 36) showing no pain or swelling. Probing depths on the surfaces of tooth 36 were 12 mm mid-buccal and disto-buccal. Probing depths on the surfaces of all other teeth were ≤ 3 mm.

After local anaesthesia, a full-thickness flap was elevated on the buccal aspect of tooth 36. The found small soft tissue which filled the space has been enucleated without extraction of the tooth and histopathologic evaluated. After flap reposition and suturing Amoxicillin was prescribed for a week and postoperative instructions were given to the patient and his parents. The postoperative follow-up visit revealed an uneventful healing period.

The histological findings showed parts of an odontogenic (radicular) cyst. No neoplastic characteristics were seen in the lesion.

At the 3-month follow-up appointment, the patient was asymptomatic, all probing depths of tooth 36 were ≤ 3.5 mm.



Figure 1- Mandibular infected buccal cyst region 36



Figure 2- 12-mm mid-buccal probing depth and suppuration

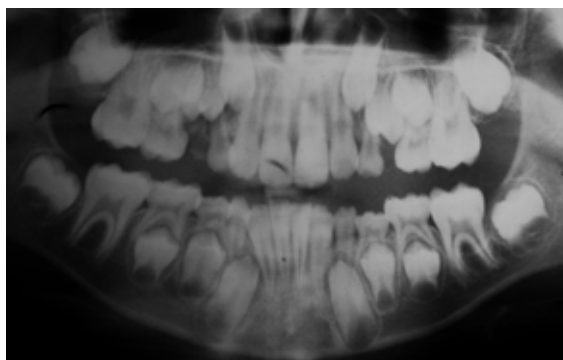


Figure 3- Initial panoramic radiograph showing well-defined radiolucencies around tooth 36

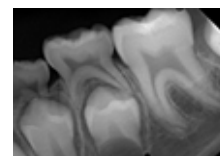


Figure 4- Initial periapical radiograph of tooth 36

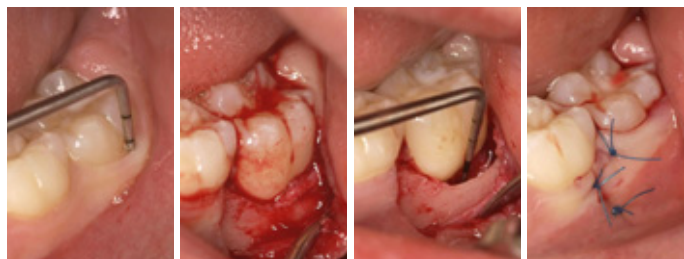


Figure 5- Surgery

- a - preoperative view of tooth 36
- b - intraoperative clinical view of the cystic lesion
- c - after enucleation of the cystic lesion
- d - repositioned and sutured flap



e- clinical aspect three months postoperative

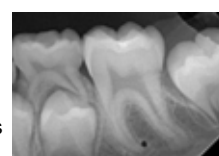


Figure 6- Periapical radiograph three months postoperative

DISCUSSION

The mandibular infected buccal cyst was first reported in the literature by *Stoneman and Worth* in 1983.

Their key clinical features are abnormal probing depths on the buccal surface and the vitality of the associated molar. Other features such as pain, swelling, and the presence of a localized abscess are all variable but may be initial presenting symptoms. Radiographically, the periodontal ligament space and lamina dura are usually unaffected (*Thikkurissy et al. 2010*).

The treatment has changed over the years (*Santos et al. 2011*).

While in first descriptions the therapy of choice was extraction of the tooth (*Stoneman and Worth 1983; Trask et al. 1985*) further on nonsurgical resolution of buccal bifurcation cyst by daily saline and hydrogen peroxide irrigation (*David et al. 1998*) was reported. Other authors pointed out that some of these lesions were self-limiting (*Pompura et al. 1997*).

Infected lesions or those increasing in size have to be treated surgically. In recent articles, the treatment used was enucleation of the cyst without extraction of the tooth involved (*Shohat et al. 2003; Thikkurissy et al. 2010; Santos et al. 2011*).

CONCLUSIONS

The majority of dental abscesses in children results from caries or trauma. A minority originate from unusual conditions. However, knowledge of these conditions will enable the general practitioner to diagnose and easily treat these entities.

One of them, the mandibular infected buccal cyst, can be treated successfully by simple enucleation without extracting the associated tooth.