Dilute initial dentofacial abscess of buccal space: a technical note

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Abstract

The treatment of the dentofacial abscess was always surgical because the evacuation of the purulent collection and removal of the cause are mandatory. Large abscesses, especially those that reach the submandibular space, require laboratory and imaging exams, but small abscesses restricted to the buccal space can be successfully treated by diluting the purulent collection with saline solution using needle and syringe.

Descriptors: Abscess; Drainage; Infection; Surgery, Oral.

INTRODUCTION

Incision and drainage of dentofacial abscesses are mandatory in the resolution of this type of infection¹⁻³. Traditionally, the incision makes it possible to drain the purulent collection and decompress the tissues, restoring the local blood perfusion. Ideally, the abscess should be evacuated at the same time as dental therapy (endodontics, periodontal scaling or dental extraction)². The incision in place and of appropriate size and fix of rubber drains cause a scar that depending on the anatomical site causes discomfort and distress to the patient mainly in females. In Brazil patients with dentofacial abscesses are routine in emergency services and invariably arrive at advanced stages of formation of extensive purulent collections³. A more extensive abscess that involves the submandibular space requires solid knowledge of the surgical anatomy, haematological imaging and tests and conventional extra oral drainage, but an abscess confined to the buccal space region (Figure 1) does not pose an anatomical challenge to the professional.

TECHNICAL NOTE

The technique of abscess diluction with aspiration using needle and seringe and lavage concomitant with saline solution (Figure 2A-B). We used this technique in inicial cases of abscesses restricted to the buccal space without clinical or laboratorial data showing disseminate infection. The incision and drainage are already indicated in the first tomographic sign of the abscess, and we recommend the surgical drainage at the beginning of the process, before the fluctuation develops. the strict observation of the patient is maintained and review of the treatment if there are indications of increase and dissemination of the infectious. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or standards." ethical comparable Informed consent was obtained from participant included in the study.



Figure 1: Coronal computed tomography showing a hypodense image in the buccal portion of the mandible.



Figure 2: A)The thicker needle making suction and the other injecting saline solution under local anestesia. B) Completed the irrigation. We use three or four syringes with saline solution.

REFERENCES

- Carter LM, Layton S. Cervicofacial infection of dental origin presenting to maxillofacial surgery units in the United Kingdom: a national audit. Br Dent J. 2009;206(2):73-8.
- Johri A, Piecuch JF. Should teeth be extracted immediately in the presence of acute infection? Oral Maxillofac Surg Clin North Am. 2011;23(4):507-11
- 3. Brito TP, Hazboun IM, Fernandes FL, Bento LR, Zappelini CEM, Chone CT et al. Deep neck abscesses: study of 101 cases. Braz J Otorhinolaryngol. 2017;83(3):341-48.

CONFLICTS OF INTERESTS

The authors declare no conflicts of interests.

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