

A Rare Case of Buccal Migratory Abscess Related to Mandibular Third Molar

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Abstract

Acute pericoronitis usually presents with severe localized pain, swelling and sometimes trismus. However, chronic pericoronitis and periodontal abscess produce a dull pain, moderate swelling and are occasionally seen migrating into distant sites producing fistulae intra-orally and/or extra-orally. Here, we present a case of a migratory abscess with intraoral sinus tract formation, at a considerable distance from the site of origin. Only two such cases have been published as of now.

Keywords: Migratory Abscess; Pericoronitis; Third Molar; Periodontal Abscess; Unusual

Introduction

The most common cause of an oro facial abscess is dental. Most abscesses are localized to the region of the causative tooth, but sometimes the pus may pool at a distance from its origin causing a secondary lesion which is more conspicuous than the primary site. This can lead to serious damage to structures adjacent to the secondary site if the cause is not diagnosed timely. This article reports the unusual location of one such abscess [1].

Case Report

A 34 year old male patient presented with draining pus associated with a growth in relation to the lower left back tooth region. On examination, a small growth, with a sessile base of size approximately 1cm X 1cm was found between 36 and 37 (Figure 1). On radiographic examination, vertically impacted 38 was seen with enlarged follicular space (Figure 2).

The facial and oral swellings were diagnosed as a *migratory abscess* originating from pericoronal infection of the lower left third molar.

The third molar was surgically extracted and granulation tissue excised (Figure 3). The wound was sutured using 3.0 silk sutures (Figure 4). The patient was put on a 5 day course of Tab Augmentin 625mg bid and Tab Metrogyl 400mg tds.

Sutures were removed 7 days post op and the patient presented with complete resolution of the abscess (Figure 5).



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8

The full diagnostic tests performed were as follows-

- Electric pulp testing showed 36,37 to be vital, done before the extraction of 38
- Periodontal probing depths as shown below, done 2 months post operatively (Figure 6,7,8).
- The periapical radiographs of 36,37 which do not seem to show significant osteitis, taken 2 months post operatively, as shown below (Figure 9,10).
- Histopathological examination of the soft tissue specimen was done, reports of which concluded the soft tissue to be "inflamed dental follicle".
- Unfortunately, the gutta percha examination could not be performed as we were unable to insert the gutta percha point into the sinus tract.
- Nevertheless, 2 month post operative clinical pictures of the patient are attached below, with no further complications and healthy surrounding tissues (Figure 11).



Figure 9



Figure 10



Figure 11

mulation of pus is commonly termed ‘a migratory abscess’ from a pericoronitis. The proximity of the abscess to the mandibular first molar can present problems in diagnosis and treatment. It is common for such a migratory abscess to point intraorally [4].

In one case reported (Ricucci, *et al.*), sinus tract developed that did not heal after conventional root canal therapy and apical surgery [2,3]. Extraction of that tooth revealed calculus like material on the root surface. Other case had showed radiographic signs of healing after apicectomy. Histology of the apical biopsy specimen demonstrated a calculus like material on the surface of the root apex. The presence of calculus on the root surfaces of these teeth may have contributed to endodontic treatment failure.

Conclusion

This case illustrates that pericoronitis from a lower third molar can present with a well-localized abscess pointing intraorally and away from the causative site. An understanding of the anatomy of the region is important to establish a correct diagnosis.

Bibliography

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Discussion

Infections originating in a tooth or its supporting structures or in the jaws or soft tissues can spread to distant sites of head and neck and chest region. Pus from pericoronitis of a lower third molar can track forward along an anatomical gutter formed by the body of the mandible and the attachment of the buccinator as it sweeps down along the external oblique ridge to the alveolar bone in the first molar region.’ Pus tracking along this inclined gutter eventually localizes in the loose connective tissues lining the undersurface of the mucosal reflection alongside the first molar. Such an accu-