

An unusual cause of a facial swelling

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ABSTRACT

This article discusses a rare cause of facial swelling secondary to an ectopic mandibular third molar and highlights the important of not overlooking plain radiographs when investigating facial swellings.

INTRODUCTION

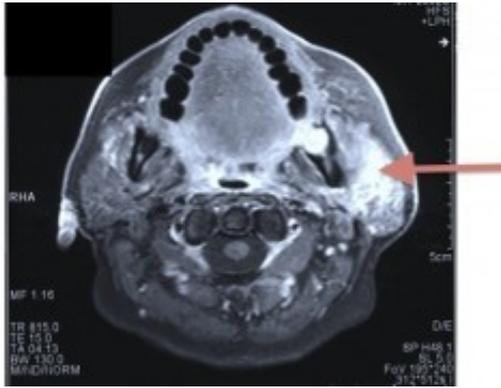
Facial swellings commonly present to General Medical and Dental Practitioners. The differential diagnosis of these swellings is vast and ranges from acute obstructive salivary gland disease to neoplastic processes. We present a rare case of a swelling in the pre-auricular region caused by an ectopic wisdom tooth and associated cyst formation.

CASE REPORT

A 68-year old female, non-smoker was referred by her General Practitioner with a tender swelling in the left pre-auricular region. The swelling had been slowly enlarging over ten years and during this time the patient had experienced acute episodes of pain and swelling that had responded to oral antibiotics.

On examination there was a 3cm diameter, firm mass arising in the left pre-auricular region, which appeared to be fixed to the deeper tissues. The overlying skin was normal in appearance and freely mobile over the mass. Clinically there was no involvement of the facial nerve.

With obstructive parotid pathology in mind a parotid sialogram was undertaken which showed no evidence of calculus formation, but demonstrated an area of altered ductal architecture stretching around a mass in the mandible. A subsequent Magnetic Resonance Imaging scan (MRI) revealed an enhancing soft tissue mass extrinsic to the left parotid gland just below the level of the mandibular condyle. (Fig. 1)



Following on from this an orthopantomogram (OPG) demonstrated an impacted wisdom tooth in the left mandibular condyle with associated cystic expansion of the surrounding cortical bone (Fig. 2).



The patient went onto have the ectopic wisdom tooth removed and associated cyst enucleated under a general anaesthetic via an intra-oral approach.

Recovery was uneventful, and on review 1 month later the swelling had completely resolved. Histopathology confirmed the cystic swelling to be of odontogenic origin.

DISCUSSION

Unerupted, impacted third molars occur in 20-30% of the population (1) and are most commonly noticed as an incidental finding on OPG rather than a patient presenting with symptoms. Ectopic mandibular third molars are not as common with only 23 cases reported in the literature since 1976 of which 13 were located in the condylar region (2). The other sites for ectopic mandibular third molars include: the ramus, coronoid process, sigmoid notch and lower border of the mandible (2).

The aetiology of ectopic unerupted mandibular third molars remains unclear but the majority present with associated dentigerous cyst formation (2). In this case it is likely that the cyst developed from the patient's ectopically placed lower right wisdom tooth. As the cyst expanded a microscopic communication developed between tooth and oral environment. This resulted in subsequent acute or chronic infection, the formation of a local inflammatory mass, which extended into the parotid region and the subsequent clinical features.

Despite the rarity of ectopic third molars, they must always be considered as a cause of facial pain or swelling and it is the recommendation of the authors that an OPG should form part of the routine investigation in such cases. Even if malignancy is considered, screening of the dentition forms an important aspect of management, especially if radiotherapy is being considered. In this case an OPG would have avoided the need for sialogram and MRI along with the associated delay.

REFERENCES

1. [Wang C, Kok S, Hou L, Yang P, Lee J, Cheng S et al. Ectopic mandibular third molar in the ramus region: report of a case and literature review. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2008;105:155–61](#)
2. [Ahmed NM, Speculand B. Removal of ectopic mandibular third molar teeth: literature review and a report of three cases. Oral Surgery. 2012; 5:39–44](#)