Acta Otorrinolaringol Esp. 2009;**60(2):**146-7

Acta Otorrinolaringológica Española

www.elsevier.es/otorrino

CASE STUDY

Ossifying fibroma of the mastoid area

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Received July 3, 2008; accepted August 25, 2008

KEYWORDS
Ossifying fibroma;
Temporal bone;
Unusual localization

Abstract
Ossifying fibromas are rare fibro-osseous lesions occurring in maxilla or mandible. However, there have been reports of the lesion developing in nasal bones, paranasal sinur, or the eye socket. We describe here a case of ossifying fibroma in the temporal bone with a review of the current literature.

PALABRAS CLAVE
Fibroma osificante;
Hueso temporal;
Localización insólita

Fibroma osificante en la mastoides

Resumen
El fibroma osificante es un tumor osteofibrótico poco frecuente que normalmente se localiza en el maxilar o en la mandíbula, aunque se ha descrito también en huesos propios de la nariz, senos paranasales y órbita. En este artículo describimos el caso de un fibroma osificante en el hueso temporal y una revisión de la literatura actual.

Introduction

Ossifying fibroma is a rare fibro-osseous lesion of the head and neck, described mainly in mandible and maxilla, although it may also have other locations such as the bones of the nose, paranasal sinuses, or orbit. We report a case of ossifying fibroma in the temporal bone and a review of the literature in this unusual location.

Clinical report

We report the case of a 56-year-old patient who came to our clinic due to left retroauricular tumour with progressive growth over a period of 10 years. It was not accompanied by otalgia, hypoacusis, tinnitus, or vertiginous syndrome. Upon physical examination, a painless mass of about 4 cm was identified in the mastoid region, of hard consistency,

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Figure 1 Computerized tomography in which a lesion adjacent to the periosteum of the mastoid can be observed.

Figure 2 Moment in surgery when the lesion is exposed through the retroauricular incision.

and not adhering to a superficial plane. In the computerized tomography (Figure 1), a 3 cm soft tissue lesion was observed adjacent to the mastoid periosteum, with minimal erosion. The patient underwent surgery with a retroauricular approach (Figure 2), and the lesion was detached from the periosteum using osteotome and grinding; the mastoid bed was regularized and it was closed by planes. The definitive pathological study described a well-defined lesion, with fibroblastic proliferation producing bone trabeculae in the lamellar bone lined by osteoblastic reaction and focal osteoclastic reaction.

In view of the histological features presented, it was classified as ossifying fibroma.

Discussion

Menzel carried out the first description of this entity in 1872, and subsequently, it was Montgomery in 1927 who coined the term ossifying fibroma.[1]

Ossifying fibroma is part of a set of benign fibro-osseous lesions (fibrous dysplasia, sclerosing osteomyelitis) that occur with similar histology and radiology. In the pathology analysis, this benign tumour consists of fibrotic tissue and lamellar bone with osteoblasts.

Some authors have described previous trauma in the area as a predisposing factor.[2]

It appears in the third or fourth decade of life (although there is a more aggressive variant, juvenile ossifying fibroma, which is typical in children under 15 years of age), with female predominance. It arises in the mandible in 75%-89% of cases (in the premolar and molar area) and in the maxilla.[1] They have also been described in other locations such as the bones of the nose, paranasal sinuses, occipital and orbit.[1-3]

The first to describe a fibroma in the temporal bone was Stecker in 1971, followed by Levine in 1981 and Zappia in 1990.[4] When this location occurs, they can take place with otalgia, conductive hypoacusis, tinnitus, otorrhea, external auditory canal stenosis, or cosmetic deformity.

In the radiology, there is a well-defined lesion which, depending on the degree of mineralization, presents a unilocular or multilocular radiolucent image with different radiopaque foci.

The differential diagnosis must exclude: osteomas and exostoses (the most frequent tumours in the temporal area),[5] osteoblastoma, invasive or ectopic meningiomas, giant-cell granulomas, aneurysmatic bone cysts, eosinophilic granulomas, and especially fibrous dysplasia, an entity with high histological similarity with ossifying fibroma, but unlike it, fibrous dysplasia usually has no capsule.

The treatment is surgical and requires complete resection to prevent recurrence.[6]

Conflict of interests

The authors declare no conflict of interest.

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