

# Unusual Case of Mastoid Osteoma

Navarrete ML\*, Salazar J, Burgos MT and Fuentes JF

Department of Otorhinolaryngology, Aut3noma University of Barcelona. Spain

\*Corresponding Author: Dr. Navarrete ML, Otorhinolaryngology Department, Vall d'Hebron Hospital. Aut3noma University of Barcelona, Spain. E-mail id: mlna@telefonica.net

Received Date: Oct 24, 2019; Accepted Date: Oct 28, 2019; Published Date: Oct 31, 2019

## Introduction

We present a case of mastoid osteoma in a 31-year-old female patient who consulted us for a left retroauricular tumor that had a progressive growth from 8 years of evolution, previously diagnosed with Chiari malformation type I as an incidental finding on MRI.

Symptoms indicated only was by intermittent disturbances and aesthetic discomfort in the area of the tumor; no associated withotic history or hearing loss, earache, otorrhea, or dizziness.

Oto-endoscope examination was within normal limits, demonstrating a hard tumor in the left mastoid region, not painful, attached, of approximately 2x2 cm. Liminal tonal audiometry evidenced a normal hearing and a left mastoid bone homogeneous lesion was observed in the CT scan and MRI of the temporal bone with a density similar to bone one, no signs of aggressiveness and could correspond to an osteoma (Figure 1 and 2). A surgical excision of the lesion was later performed (Figure 3).

## Discussion

Mastoid osteomas, like those of the rest of the body, are benign tumors, of slow growth, which fall within the forming tumors of bone [1]. This tumor has its highest incidence during the sixth decade of life and affects women more than men (ratio of 3:1) The most commonly reported location is in the frontal ethmoidal region [2,3]. In addition to being a rare bone tumor, temporal or occipital bone involvement is even more unusual with only 150 cases reported in the literature [4]. While its etiology is unknown, its incidence can be divided in syndromic and non-syndromic [5]. It may be related to osteoblastomas or simply a developmental abnormality.

This entity tends to be asymptomatic or present the symptoms of a retrauricular protrusion, painful or of impact merely aesthetic, as in the case of our patient.

The CT, as the gold standard for diagnosis, demonstrates the existence of a single lesion of high density, with well-defined edges, and that does not cause sclerosis, erosion or bone rarefaction in the adjacent bone as a typical finding of a mastoid osteoma [6,7]. The main purpose of the imaging study is to rule out the invasion of the inner table of the calvarium and intracranial extension of the lesion [8,9].

The treatment is reserved for symptomatic cases or aesthetic purposes that need a surgical removal. Recurrence is rare and malignant transformation has not been reported [10].

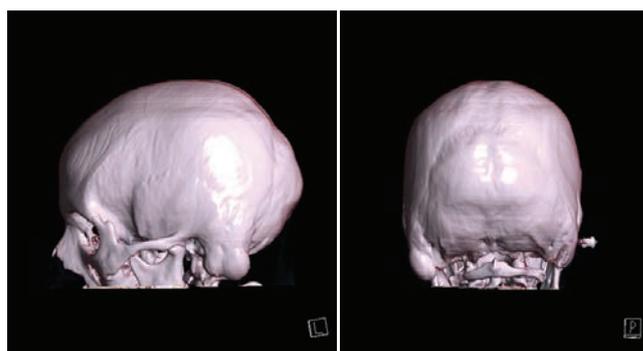


Figure 2: 3D Reconstructions.

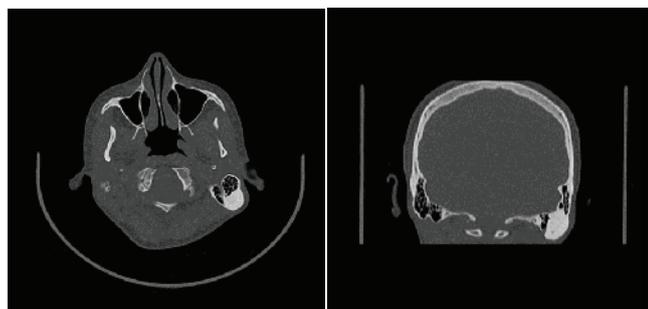


Figure 1: CT axial and coronal slides.

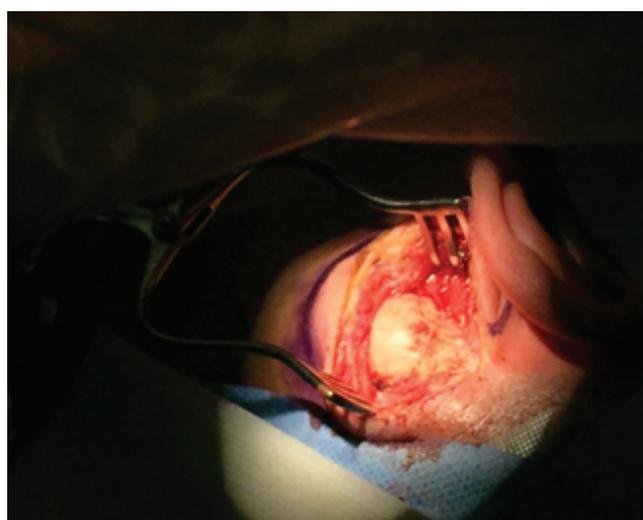


Figure 3: Intraoperative image of the osteoma retroaural approach.

**Bibliography**

1. Park SJ, Kim YK. "A case of giant osteoma developed from the mastoid cortical bone". *Korean Journal of Audiology*. 2012; 16: 95-98.
2. Chalaint B. Ivory osteoma of the craniofacial skeleton. *J Craniofac Surg*. 2003; 14: 729-735.
3. Das LCA, Kashyap GCR. Osteoma of the mastoid bone - a case report. *MJAFI* 2005; 61:86-7.
4. Perez AD, Romero RR, Durán ED. The osteoma in the mastoid, an incidental finding? *ACTA Otorhinolaryngology Esp*. 2011; 62:140-143.
5. Martinez R, Morais D, Ramirez B, Martínez P, Benito JI. Mastoid osteoma. *ACTA Otorhinolaryngology Esp*. 2003; 54: 94-97.
6. Das AK, Kashyap RC. "Osteoma of the mastoid bone-a case report". *Medical Journal Armed Forces India*. 2005; 61: 86-87.
7. Carlos UP, de Carvalho RWF, Almeida AMG, Rafaela ND. "Mastoid osteoma". "Consideration on two cases and literature review". *International Archives of Otorhinolaryngology*. 2009; 13: 350-353.
8. Meher R, Gupta B, Singh I, Raj A. "Osteoma of occipital bone". *Indian Journal of Surgery*. 2004; 66: 365-367.
9. Güngör A, Cincik H, Poyrazoglu E, Saglam O, Candan H. Mastoid Osteomas: Report of Two Cases. *Otology& Neurotology*. 2004; 25: 95-97.
10. Probst LE, Shankar L, Fox R. "Osteoma of the mastoid bone". *Journal of Otolaryngology*. 1991; 20: 228-230.