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ANSWER: LEFT GLOMUS TYMPANICUM.

Figure 1: (a) Bulging of left tympanic membrane, (b) Coronal high-resolution computed tomography temporal revealing soft tissue mass in left middle ear (Yellow arrow) with evidence of ossicle erosion (Blue arrow showing erosion of body of incus).

Glomus tympanicum (GT) is the commonest neoplasm of middle ear.¹ GT is a part of glomus tumour and is a rare neuroendocrine tumour arising from paraganglionic cells, glomus chemoreceptors which courses along the tympanic segment of Jacobson's nerve (IXth) and Arnold's nerve (Xth) nerve located in the middle ear.² These baroreceptors serve to regulate oxygen pressure in middle ear and mastoid. Patient's classically presents with pulsatile tinnitus, hearing loss and otalgia. Other additional symptoms include aural fullness, otorrhagia, facial asymmetry.³

Hallmark of GT is identified on otoscopic examination which reveals a retrotympanic bright-red mass.⁴ Additionally, blanching of tympanic membrane can be seen with pneumatic otoscopy or on Valsalva manoeuvre (Brown sign) can be elicited.⁴ Diagnosis can be made via meticulous clinical examination. Despite that, imaging notably HRCT will delineate the tumour as well as extension of the mass. MRI with gadolinium allows soft tissue structures to be outlined as well as defining intracranial and perineural infiltration.

Surgical resection is the gold standard treatment for GT. Drawback in operating GT besides being a vascular tumour is small space within the middle ear. In our patient, endoscopic excision of tumour was performed which revealed vascular lesion arising from promontory, eroding malleus and incus and was successfully removed completely. Histo-

pathological examination of mass revealed neoplastic cells exhibiting Zellballen formation separated by thin fibrovascular septae, suggestive of glomus tympanicum (Figure 2). Patient was discharged home subsequent day with no evidence of recurrence till date.

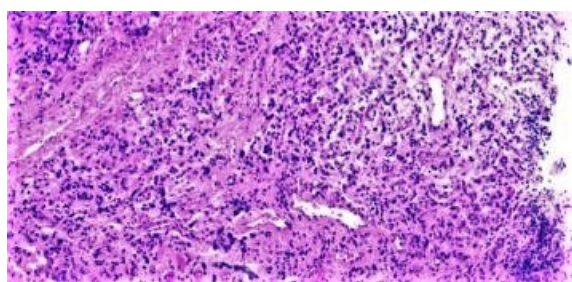


Figure 2: Hematoxylin & Eosin stain shows nests of neoplastic cells exhibiting Zellballen formation (magnification x200)

Vague presentation as unilateral aural fullness with bulging of tympanic membrane can be mistaken as middle ear effusion (MEE). Tympanotomy, done usually for MEE will lead to cataclysmic bleed in cases of misdiagnosed GT. It is thus imperative that unilateral bulging tympanic membrane in adult patient is not mistakenly diagnosed as MEE and imaging is carried out to rule out other sinister neoplasm. Overall prognosis is good with complete resection but recurrence rate of about 5.9% has been reported.⁴

REFERENCES

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