

Acoustic Schwannoma on MRI- A Case Report

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Abstract

Acoustic schwannoma is a cerebropontine angle tumour arising from the Schwann cells and it has characteristic MR findings which enable preoperative diagnosis easy. We present a case of 30 year old female having left sided sensory-neural hearing loss with MRI features suggesting acoustic schwannoma.

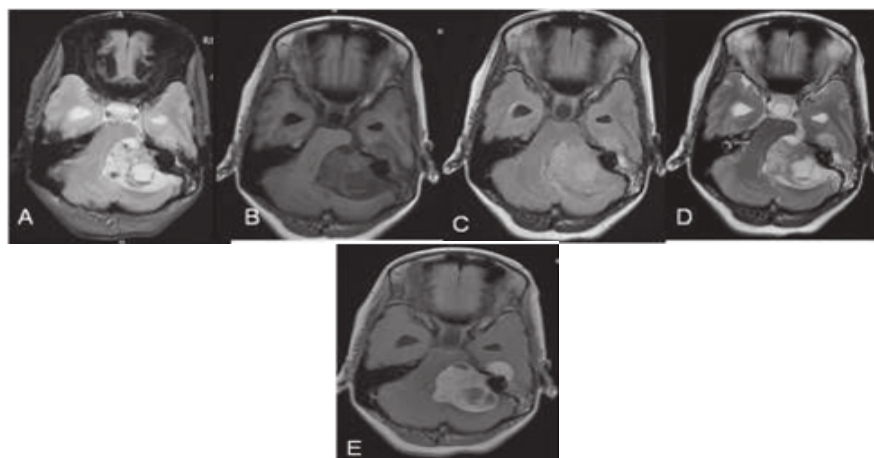
Keywords: Acoustic schwannoma, cerebro-pontine angle

INTRODUCTION

Acoustic or vestibular schwannomas are the most common cerebellopontine angle tumor having treatment options of surgical resection, stereotactic radiosurgery, and observation. MR imaging hold importance in initial screening, evaluation, and follow-up assessment of these schwannomas. We present a case report of 30 year old female with gradually increasing sensory-neuronal hearing loss on left side since over a year. MRI suggested the diagnosis of left sided acoustic schwannoma.

CASE REPORT

A 30 year old female presented to us for MR brain scan referred to us by our Neuro-surgeon, she had history of sensory-neuronal hearing loss on left side which was gradually increasing for past one year or so. We did MR scan of her brain which showed well defined mass in left CP angle showing heterogeneous signal and cystic component extending into left IAC (fig.A,B,C,D) and post contrast image (fig.E) shows avid heterogeneous enhancement. We made a diagnosis of acoustic schwannoma which was further confirmed on histopathological examination post-resection.



A 35 year female presenting with sensorineuronal hearing loss CEMRI shows well defined mass in left CP angle showing heterogeneous signal and cystic component extending into left IAC (fig.A,B,C,D) and post contrast image (fig.E) shows avid heterogeneous enhancement. Note is made of small meningioma in relation to left temporal lobe

DISCUSSION

Schwannoma is a tumour arising from schwann cells and CPA is the most common location and is 6-8% of all intracranial tumours and 85- 90% of all CPA tumour. Clinical presentation is usually with sensorineural hearing loss, tinnitus and vertigo, these symptoms are gradually progressive in nature. Key radiological diagnostic clue: 1) Avidly enhancing CPA mass 2) Intracanalicular extension with "Ice-cream cone appearance" 3) May show cystic degeneration 4) CT may show only widened and erosion of porous acousticus.

Common differentials are

Meningioma-Dural based mass eccentric to porous acoustic.

Epidermoid cyst-Insulating mass with restricted diffusion.

Arachnoid cyst-pushing CPA lesion that does not enter IAC and gives CSF signals on all pulse sequences.

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