INTRODUCTION

The cerebellopontine angle cistern lies between the anterolateral surface of the pons and cerebellum and the posterior surface of the petrous temporal bone. Important structures within the CPA cistern include the fifth, seventh, and eighth cranial nerves, the superior and anterior inferior cerebellar arteries, and tributaries of the superior petrosal veins ***(Osborn et al, 1994).***

MRI can image the brain with 3D resolution. MRI images distinguish between gray &white matter, ventricular fluid, lesioned tissue, It is the best means of localizing neurological lesions ***(Kalat, 1995).***

The clinical utility of MR cisternography in the cerebellopontine angle using heavily T2-weighted images acquired by 2D FSE or 3D FSE has recently been reported ***(Iwayama et al, 1999).***

Magnetic resonance imaging is the imaging modality of choice for lesions of the cerebellopontine angle and internal auditory canal ***(smirniatopoulous et al, 1993).***

Lesions of the cerebellopontine angle are divided into these native to the angle (vestibular schawannoma, meningioma, epidermoid, arachnoid cyst, metastases, lipoma etc) and those extending to the angle from adjacent structure (glioma, ependymomas, choroid plexus papilomas, vascular malformation) ***(Zamani,2000).***

Cerebellopontine angle tumors are mainly benign and extra axial. Vestibular schwannomas are by the far the most important lesion of cerebellopontine angle. It presents as a round mass centered along the axis of internal acoustic meatus, the largest portion being in the cerebellopontine angle. The tumor enhances after gadolinium administration ***(Sarrazin et al,2000).***

Patient with acoustic neurinomas are usually 40 to 60 years of age and complain of hearing loss or tinnitus. Other associated symptoms or signs include unsteadiness, vertigo, pain, diminished corneal reflex and ataxia. ***(Victor et al, 1985)***

MRI finding of acoustic schwannoma is mimicked by finding of a solitary mass in cerebellopontine angle in a patient with recurrent nasopharyngeal carcinoma with associated bony destruction. ***(Gouliamos et al, 1996).***

Meningioma were generally hypo intense on T1-weighted images and hyper intense on T2-weighted images relative to cerebral white matter. In comparison with cortex, they were hypo intense or iso intense on T1-weight images and iso intense or hyper intense on T2-weighted images. ***(spagnoli et al, 1986).***

The epidermoid cysts demonstrates low-signal intensity on T1-weighted MR images and hyper intense on T2-weighted images. MR is superior to CT in the evaluation of epidermoid cysts and is particularly useful in surgical planning. ***(Tampieri et al, 1994).***

The CPA metastases may be the initial or only site of metastases, and may be occur many years after the initial diagnosis of malignancy. MR finding with clinical correlation are not only useful for the detection of CPA metastases, but also for their differentiation from the more common benign CPA tumors ***(Yuh et al, 1993).***

The cerebellopontine angle form a junction where neurology and otology overlap. In neurotology, radiologic evaluation for a possible tumor include:

1. Investigation of cerebellopontine angle syndrome in search of one of the tumor in this region.
2. Investigation of pulsatile tinnitus or the jugular foramen syndrome in search of tumors or vascular lesions of the region. ***(William , 1991).***