

RETROCLIVAL CYSTIC INTRACRANIAL LESION

Muhammad Masood Hussain

Rashid Hospital, Dubai, United Arab Emirates

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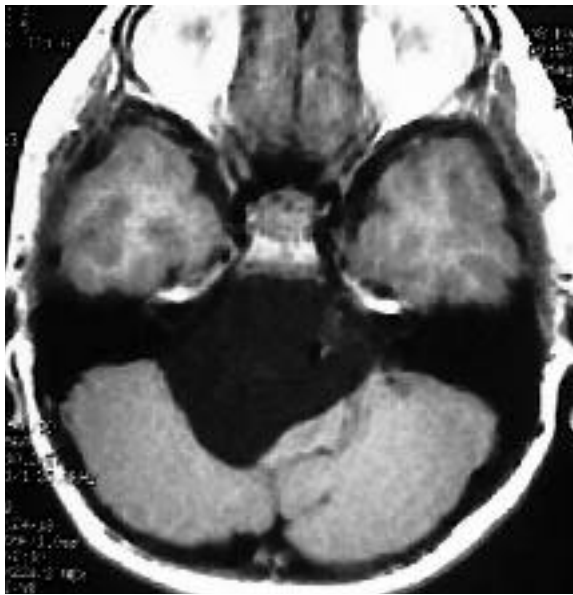


Figure 1. T1-weighted MR axial image. Hypointense large midline retroclival mass more to the right causing shift of brainstem to the left and mass effect on the right cerebellum.

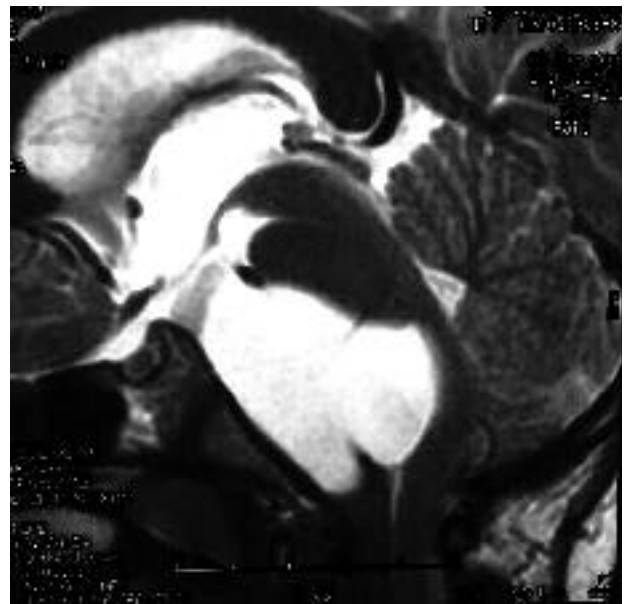


Figure 2. T2-weighted MR sagittal image shows a fluid intensity signal within the mass, suggestive of a cystic lesion. Severe posterior displacement of the brainstem is noted.

DIAGNOSIS

A 7-year-old male presented with a 3-week history of headache and occasional vomiting. On examination he was fully conscious without any neurological deficits other than generalized increase in tone and deep-tendon reflexes. The patient underwent craniotomy and intra-operatively an arachnoid cyst was found. After removing or fenestrating intracystic septae, generous communication was created between the basal cisterns and the arachnoid cyst. There were no complications. At 1 year follow-up, the child showed normal development and continued relief of symptoms.

COMMENT

Arachnoid cysts are non-tumorous intra-arachnoid fluid collections. These account for only 1% of all intracranial space occupying lesions. Etiology is considered to be a developmental abnormality of the arachnoid, originating

from a splitting or duplication of this membrane. Head trauma in infancy is also postulated as one of the causes.

Anatomically they are mostly located in the anterior part of the middle fossa (55%), with overall 77% of cysts being distributed within the supratentorial compartment. Other than the middle fossa at a supratentorial location, the quadrigeminal plate, sellar region, interhemispheric fissure and cerebral convexity are the other locations described. Posterior fossa arachnoid cysts are rather uncommon when compared with more frequent supratentorial locations. At infratentorial locations they are commonly located posteriorly, either in the midline or laterally against the cerebellar hemispheres. A third, relatively common location is within cerebellopontine angle. Ventrally located midline posterior fossa arachnoid cysts are extremely rare.¹ In previous reports, a posterior suprasellar extension was found relating these to more classic suprasellar cysts.^{2,3} The case reported here appears distinctive in that the cyst occupies the entire retroclival length.⁴

These cysts can remain asymptomatic and are found incidentally on radiological investigations. They may remain quiescent for years or they can expand and produce symptoms by causing compression on adjacent brain tissue or through increased intracranial pressure.

Management strategies include observation in asymptomatic cases. For symptomatic cases, surgical intervention can be considered. Surgically, arachnoid cysts can be treated by cyst aspiration which may be done by stereotactic assistance, shunt procedure, neuroendoscopic fenestration into adjacent CSF cistern, or craniotomy for excision and marsupialization of the cyst.

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