

## Epidermoid cyst

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**Section:** Neuroradiology

**Area of Interest:** Neuroradiology brain

**Procedure:** Diagnostic procedure

**Imaging Technique:** MR-Angiography

**Special Focus:** Congenital Case Type: Clinical Cases

**Authors:** Fatima Mubarak

**Patient:** 55 years, male

### Clinical History:

A 55-year-old male patient with known epilepsy presented with status in the emergency room.

### Imaging Findings:

A CSF signal lobulated lesion low on T1W(C), high on T2W(B), nonenhancing (A) and showing diffusion restriction (D and E) centred in the left ambient cistern with extension inferiorly into the cerebellopontine angle cistern (arrows). Although the signal intensity is similar to CSF, the internal septations and heterogeneity suggest an epidermoid cyst.

### Discussion:

Epidermoid cyst:

Background: The cyst is a congenital inclusion of ectodermal epithelial elements during neural tube closure. It has cauliflower-like margins, usually scalloped or irregular. The cyst is T1 and T2: isointense or slightly hyperintense to CSF on FLAIR. It shows diffusion restriction. On surgery the lesion is a pearly white mass. The cyst wall has an internal layer of stratified squamous epithelium covered by fibrous capsule [1].

Clinical presentation: The symptoms depend on the location and growth pattern.

Imaging perspective: Diffusion restriction in non-enhancing lesion. [2]

Outcome:

Complete surgical removal is the goal.

Sometimes aggressive total removal may cause significant neuropathies.

A possible recurrence takes many years to grow. [2]

Teaching point: Diffusion restriction in the non-enhancing cisternal lesion.

**Differential Diagnosis List:** Epidermoid cyst, Arachnoid cyst, Cystic neoplasms like cystic meningioma/cystic schwannoma

**Final Diagnosis:** Epidermoid cyst

### References:

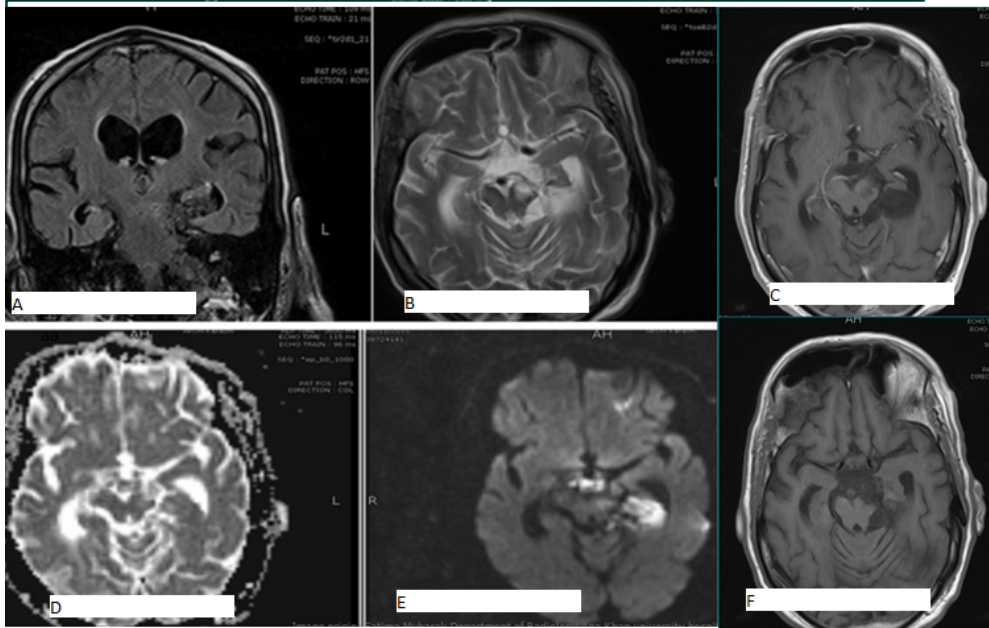
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fractional anisotropy. *Neuroradiology* 51(2):123-9 (PMID: [18839162](#))

**Figure 1**

a



**Description:** A CSF signal lobulated lesion centered in the left ambient cistern with extension inferiorly into the cerebellopontine angle cistern. The lesion is nonenhancing and showing diffusion restriction.

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