Case 1756

Eurorad ••

Rathke's cleft cyst

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DOI: 10.1594/EURORAD/CASE.1756 ISSN: 1563-4086 Section: Neuroradiology Imaging Technique: MR Case Type: Clinical Cases Authors: S. Cakirer Patient: 34 years, female

Clinical History:

The patient presented with severe headache associated with diabetes insipidus. **Imaging Findings:**

The patient presented with severe headache associated with diabetes insipidus.

A sellar MRI scan was performed on a 1.5T MRI scanner, with SE T1-weighted, FSE T2-weighted and postgadolinium SE T1-weighted images in the sagittal and coronal planes. A well-circumscribed intrasellar lesion with high signal intensity on spin-echo T1-weighted images, and with mixed hypo- and hyperintense signal intensity characteristics on fast spin-echo T2-weighted images was detected. The lesion did not enhance with contrast. The lesion was surgically removed with a resultant diagnosis of a Rathke's cleft cyst, containing high amounts of cholesterol and protein.

Discussion:

Rathke's cleft cysts are uncommon benign cystic lesions that are derived from the remnants of the epithelium embryologically lining Rathke's cleft (the craniopharyngeal duct). They are intrasellar in 50% of cases, suprasellar in 25% of cases, and both in 25% of cases.

The cysts are usually simple, lined by a single epithelial layer. They may contain variable amounts of protein, mucopolysaccharide, cellular debris, and cholesterol. Their signal intensity may be correspondingly high, low, or intermediate on T1- and T2-weighted sequences depending on the contents of the cystic lesion. Gadolinium enhancement is usually absent, however they may rarely have a thin peripheral enhancement.

Craniopharyngiomas and cystic pituitary adenomas should be considered in the differential diagnosis of Rathke's cleft cyst. Craniopharyngiomas have common floccular calcification and usually have contrast enhancing solid or rimlike components. Cystic adenomas usually reveal peripheral contrast enhancement. Rathke's cleft cysts are usually asymptomatic and are discovered incidentally. They may cause pituitary dysfunction, visual disturbances, and headache in rare cases. Most cases of Rathke's cleft cyst are stable and do not need any treatment.

Differential Diagnosis List: Rathke's cleft cyst

Final Diagnosis: Rathke's cleft cyst

Figure 1



Description: Spin-echo T1-weighted sagittal image reveals a well-circumscribed intrasellar lesion (arrow) with high signal intensity. **Origin:**



Description: Spin-echo T1-weighted coronal image reveals a well-circumscribed intrasellar lesion (arrow) with high signal intensity. **Origin:**



Description: Fast spin-echo T2-weighted coronal image reveals a well-circumscribed intrasellar lesion (arrows) with mixed high and low signal intensity. **Origin:**