45-year-old right-handed female who presents for surveillance MRI imaging for a known clinical condition. Overall, she states that she is doing well clinically. She occasionally has frontal sinus type headaches.

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T1 Sagittal
Rathke Cleft Cyst
T1 Sagittal

- Isointense cystic lesion centered within the right inferolateral aspect of the adenohypophysis.
- Lesion measures approximately 13 mm CC x 12 mm TRV x 13 mm AP.
• Multilobulated T2 hyperintense cystic lesion centered within the right inferolateral aspect of the adenohypophysis.
• The infundibulum remains minimally deviated to the left.
• No mass effect is exerted upon the optic chiasm.
• The cystic lesion extends within the medial aspect of the right cavernous sinus.
• The adjacent cavernous segment of the right internal carotid artery remains patent.
T2 Coronal

- Multilobulated T2 hyperintense cystic lesion centered within the right inferolateral aspect of the adenohypophysis.
- The lesion measures 13 mm CC x 12 mm TRV x 13 mm AP.
- The infundibulum remains minimally deviated to the left.
- No mass effect is exerted upon the optic chiasm.
- The cystic lesion extends within the medial aspect of the right cavernous sinus.
Rathke Cleft Cyst

- Nonneoplastic.
- Arising from remnants of embryonic Rathke cleft.
- Majority cases are discovered incidentally.
- Peak presentation 40-50 years; female predominance.
- Diabetes insipidus (DI) in 7-20% of all patients.

Typical presentation:
- Headaches;
- Endocrine dysfunction;
- Visual loss;
- Chemical meningitis;
- Lymphocytic hypophysitis;
- Intracystic hemorrhage.

Zada, G., Neurosurg Focus, 2011.
https://radiopaedia.org
Imaging Findings

- Well-circumscribed.
- Spherical or ovoid shaped lesions in the sellar region.
- Diameter ranges from 5 to 40 mm.
- Little or no enhancement on MRI with Gadolinium.
- The cyst can be hyperintense or hypointense on MRI T₁ and T₂.
- Typically, non-calcified and of homogenous low attenuation on non-contrast CT scan.
- Patients should have ophthalmology and endocrinology consults.

References

- https://radiopaedia.org