Commentary

The present report[1] illustrates a case where a young adult with hypothalamic glioma presented with radiological features similar to a craniopharyngioma. It is often desirable to know the histology of the lesion before proceeding for definitive treatment as the management options of the tumors in the suprasellar region vary considerably regarding the extent of surgical resection and the approaches.

Both craniopharyngiomas and hypothalamic gliomas occur in the suprasellar region, with a relatively normal pituitary gland and without any enlargement of the sellar dimensions. This essentially excludes the most common tumor in young adults in the sellar – suprasellar region, the pituitary adenoma, which is invariably associated with enlargement of the sella. As the authors have described, calcification is a differentiating feature and is more common with craniopharyngioma. The other differentiating feature is usually hyperintense signals in T1-weighed images, which, if present, indicate a diagnosis of craniopharyngiomas. There is a complex correlation between the cyst appearance in the magnetic resonance (MR) imaging and the biochemical composition of the cyst fluid, which depends on the lipid, protein and iron content in the cyst fluid. However, MR spectroscopy has been reported to differentiate between these two, with hypothalamic gliomas demonstrating increased choline to N-acetylaspartate ratio while craniopharyngiomas being associated with a lactate peak.[2] Despite all these, in a given case, it is not uncommon to have difficulty in differentiating the tumors in pre-operative imaging, warranting a biopsy.

Aaron Mohanty

Department of Surgery, Division of Neurosurgery, University of Texas Medical Branch at Galveston, Galveston, TX, USA

Address for correspondence:
Dr. Aaron Mohanty,
Division of Neurosurgery,
301 University Boulevard,
Rt 0517, Galveston,
TX, 77555-0517, USA.
E-mail aarmohanty@yahoo.com

References

1. Vyas S, Nidhi Rajpal N, Tiwari MK, Radotra BD, Khandelwal N. Hypothalamic glioma masquerading as craniopharyngioma. J Neurosci Rural Pract 2013;4:323-25.
2. Sutton LN, Wang ZJ, Wehrli SL, Marwaha S, Molloy P, Phillips PC, *et al.* Proton spectroscopy of suprasellar tumors in pediatric patients. Neurosurgery 1997;41:388-94.

Access this article online	
Quick Response Code:	Website: www.ruralneuropractice.com