NASOPHARYNGEAL CRANIOPHARYNGIOMA

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Background

- Craniopharyngiomas are uncommon, slow growing tumors that arise from the epithelial remnants of Rathke’s pouch. Prevalence is approximately 1/50,000.1
- More than 95% of cases are found in the sella.2 Fifty cases were reported to have infrasellar extension. Rarely, it can be purely infrasellar.
- To date, this is the 14th case of a purely infrasellar craniopharyngioma reported worldwide.

Objective

To describe the occurrence of a purely infrasellar craniopharyngioma in the nasopharynx presenting as nasal obstruction, epistaxis and frontal headache in a healthy 22-year-old female.

Results

Figure 1. Rigid nasal endoscopy showed a fleshy, smooth, firm mass with prominent blood vessels in both nasal cavities from the middle turbinate extending to the nasopharynx.

Figure 2. Coronal (A) and sagittal (B) views of the contrast-enhanced paranasal sinus CT scan revealed a heterogeneously enhancing mass with calcifications occupying the nasopharyngeal area and left sphenoid sinus.

Figure 3. Coronal (A) and sagittal (B) views of the cranial MRI demonstrated an irregularly enhancing lobulated mass in the nasopharynx and inferior aspect of the left sphenoid sinus. No mass was visualized in the sella and parasellar regions.

Wide excision via transnasal endoscopic approach showed a nasopharyngeal tumor from the sphenoid sinus that is grainy, paste-like, encased within the nasal mucosa with bony formations on some areas.

Final histopathology reported several layers of tumor cells in palisading rims of cuboidal to columnar epithelial cells arranged in pattern of cords, nests and trabeculae with areas of epithelial whorls and foci of keratinization, consistent with a craniopharyngioma.

Conclusion

- This report highlights that in a case of nasal obstruction due to a nasopharyngeal mass without neurologic deficits, differential diagnosis should include an infrasellar (e.g. nasopharyngeal) craniopharyngioma.
- Work up should include biopsy, CT scan and MRI to evaluate for intracranial involvement and endocrine studies as indicated.
- Complete excision is the accepted treatment at present. Close post-operative surveillance with imaging studies is warranted due to the possibility of recurrence.

References


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