CRANIOPHARYNGIOMA

The craniopharyngioma is an epithelial neoplasm, ordinarily located in the suprasella or intrasellar regions. The tumor grows in different directions and sometimes may present as a swelling in the nasopharynx. For that reason, it needs to be differentiated from other nasopharyngeal masses such as a Rathke's cleft cyst and epidermoid cyst. The Rathke's cleft cyst has a single layer of cuboidal to columnar cells lining the cyst with ciliated and mucinous secreting cells, and the mucinous, clear to brownish content helps to differentiate it from an epidermoid cyst which would contain cheesy material.

Microscopically, the craniopharyngioma shows two patterns. One has squamous epithelium forming solid nests or lining cysts. The epithelium may form keratin pearls but ordinarily does not contain keratohyalin granules such as appear in epidermoid cysts. In the second form, the neoplastic cells have an ameloblastoma-like appearance with nests of loose stellate cells surrounded by single layers of palisaded columnar cells. This may take on the appearance of a cholesteatoma or may look much like an ameloblastoma of the mandible.

Craniopharyngioma. Loose stellate epithelial cells surrounding single layers of pseudostratified palisading columnar cells. Calcification (not seen here) develops in most craniopharyngiomas and provides a radiologic hint as to the diagnosis. The outer border of cells is oriented perpendicularly to the stellate epithelium.

