Rathke cleft cysts

NELSON M. OYESIKU, M.D., PH.D., AND KALMUN D. POST, M.D. 1,2,3

1Departments of Neurosurgery and Medicine (Endocrinology), Emory University, Atlanta, Georgia; and Departments of 2Neurosurgery and 3Medicine, Mount Sinai School of Medicine, New York, New York

Rathke cleft cysts are benign sellar or suprasellar lesions composed typically of a thin cyst wall enclosing a mucous, gelatinous, or caseous liquid core. Excluding adenomas, they are the most common lesion in the sellar region. 1,3 The cysts are a derivative of the Rathke pouch, which itself is a normal component of pituitary development that gives rise to the anterior lobe, pars intermedia, and pars tuberalis of the pituitary gland. Rathke cysts are in effect an inappropriate persistence of a Rathke pouch that fails to close as it normally should early in fetal development. Consequently, the cysts are typically found within the gland or indeed anywhere along the usual migration path of the Rathke pouch. Most Rathke cysts are very often an imaging curio typically uncovered incidentally when imaging is performed for unrelated symptoms or events. The cyst typically appears as a hyperintense MR imaging signal on both T1- and T2-weighted images. 2 Rathke cysts can become symptomatic and cause headaches, hypopituitarism, or visual compromise from compression of the anterior visual pathways. Rarely, they can cause chronic inflammation or infection.

As with most sellar and suprasellar lesions, the preferred treatment (when treatment is indicated for related symptoms) is drainage, decompression, or resection via the transsphenoidal approach. Results have been good with low morbidity. However, many asymptomatic cysts can be safely monitored with serial MR imaging. Additionally, cysts should be monitored even after successful resection since they can recur. 4 This issue of Neurosurgical Focus examines contemporary knowledge on the presentation, imaging, treatment, and outcomes of patients with Rathke cleft cysts. (DOI: 10.3171/2011.5.FOCUS11116)

References