Teaching NeuroImages:

A slowly growing benign brain mass

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Figure 1 Annual brain MRI examinations

(A–H) T2-weighted images (repetition time msec/echo time msec, 2,150/30; 3-mm-thick sections; matrix, 256 × 256; field of view 250 mm²) show a neuroglial cyst in the right hemisphere measuring 16 cm³ initially and increasing to 175 cm³ with considerable mass effect after 7 years.

A 33-year-old woman presented with occasional mild nonlateralized headache. Examination was normal. Brain MRI revealed a neuroglial cyst in the right hemisphere which expanded slowly but relentlessly over subsequent years (figure 1; figure e-1 on the *Neurology*[®] Web site at www.neurology.org). At the last MRI, the lesion produced considerable mass effect, but the patient's examination was still normal. She refused surgery. Neuroglial cysts are uncommon congenital lesions.^{1,2} Unlike the more common arachnoid cysts, they are located within brain parenchyma and arise from remnants of embryonic neural tube elements, sequestered in the developing white matter. Most neuroglial cysts remain stable

in size. Minimal but persistent intracystic CSF secretion may explain cyst expansion over time.

AUTHOR CONTRIBUTIONS

Dr. Raz: manuscript drafting and literature research. Dr. D'Ambrosio: revising the manuscript for intellectual content. Dr. Fiorelli: manuscript drafting and revising the manuscript for intellectual content.

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Supplemental data at
www.neurology.org

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