Teaching NeuroImages:

Spontaneous resolution of a giant intracranial arachnoid cyst

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Figure 1 Brain MRI

Axial T2-weighted imaging (A, B), axial T1-weighted imaging (D, E) and coronal FLAIR image (C, F) show a giant cystic lesion in the left middle cranial fossa, and brain tissue was significantly compressed. Arachnoid cyst was diagnosed, which is defined as simple cyst with CSF density on imaging displacing adjacent structures, with or without bony remodeling.

A giant arachnoid cyst ($6 \times 8 \times 11$ cm) of left middle cranial fossa was found incidentally in a 3-year-old boy with head MRI examination for increased head circumference (figure 1). Surgical intervention was refused by his parents since the boy was asymptomatic, and the patient was followed up. Repeated MRI performed 2 years later revealed disappearance of the cyst, and the compressed brain tissue had significantly re-expanded (figure 2). There was no history of head trauma or stroke. The spontaneous resolution of a giant intracranial arachnoid cyst is extremely rare and the mechanism is not clear.^{1,2}

AUTHOR CONTRIBUTIONS

Zhiyong Liu provided pictures of the patient and drafted the manuscript. Jin Li revised the manuscript. Jianguo Xu was responsible

for the study concept and revised the manuscript for intellectual content.

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DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

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Figure 2 Repeated MRI

Axial T2-weighted imaging (A, B), axial T1-weighted imaging (D, E), and coronal FLAIR image (C, F) indicate the disappearance of the cyst and the compressed brain tissue has re-expanded into the seemingly normal left temporal lobe (arrow). Axial T1-weighted imaging (E) reveals that there was residual cyst wall (arrow).

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