Teaching NeuroImages: Migrating sparganum captured on brain MRI

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A 16-year-old girl presented with repeated seizure, headache, and vomiting. One year after symptom onset, MRI revealed a midbrain lesion (figure 1). Symptoms persisted despite antituberculosis treatment. Repeat MRI 1 year later showed lesion of similar size/shape, but shifted by 1.4 cm. *Spirometra mansoni* antibody was positive in serum and CSF. Sparganosis was verified upon surgery (figure 2). Symptoms disappeared after surgery, and she was discharged. Key features indicative of sparganosis in this case included migrating lesion and positive antibody. Definitive diagnosis requires recovery of sparganum from the lesion.¹ Surgery provides a cure; pharmacotherapy is typically ineffective.²

Author contributions

Z. Yan: study design and manuscript writing. M. Zheng: study design and surgery.

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Disclosure

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

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Figure 1 Postcontrast T1-weighted MRI shows migrating gadolinium-enhancing lesion

(A, B): 1 year after symptom onset; (C, D): 2 years after symptom onset. Arrows indicate lesion site.

Figure 2 Sparganum retrieved by surgery and hematoxylin & eosin (H&E) staining of the lesion

(A) A ribbon-like live worm removed by surgery, measuring 7 cm in length and 1.2 mm in width. (B) H&E staining (x40) shows central necrosis (▲) with lymphocytic and eosinophilic cell infiltration (●) in the periphery of the lesion.

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