

Teaching NeuroImages: Migrating sparganum captured on brain MRI

Zhenwen Yan, MD, PhD, and Meiguang Zheng, MD

Neurology® 2019;92:e1143-e1144. doi:10.1212/WNL.0000000000007046

Correspondence

Dr. Yan
yanzhw@mail.sysu.edu.cn

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

MORE ONLINE

→Teaching slides

links.lww.com/WNL/A828

Author contributions

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

Study funding

No targeted funding reported.

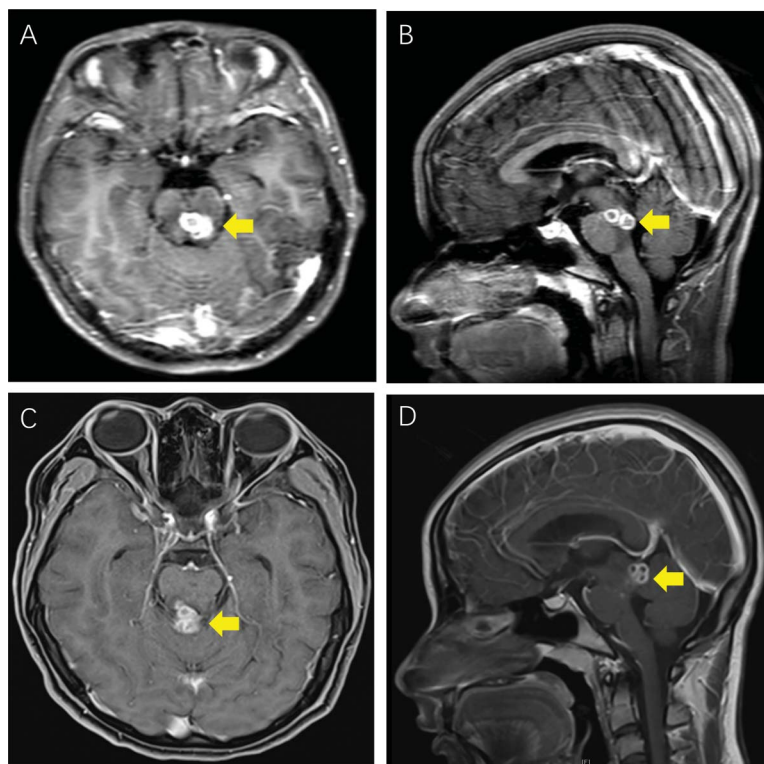
Disclosure

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

References

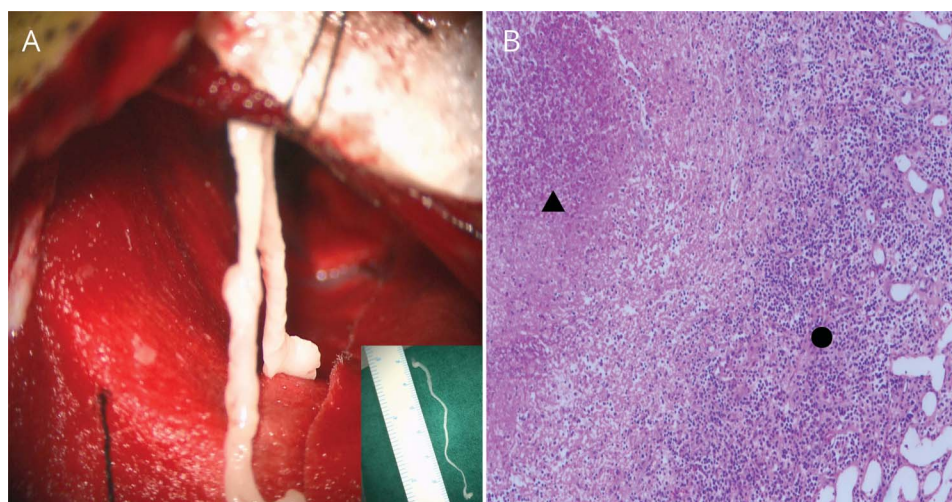
1. Liao H, Li D, Zhou B, et al. Imaging characteristics of cerebral sparganosis with live worms. *J Neuroradiol* 2016;43:378–383.
2. Kim DG, Paek SH, Chang KH, et al. Cerebral sparganosis: clinical manifestations, treatment, and outcome. *J Neurosurg* 1996;85:1066–1071.

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 ($\times 40$) shows central necrosis (\blacktriangle) with lymphocytic and eosinophilic cell infiltration (\bullet) in the periphery of the lesion.

Neurology®

Teaching NeuroImages: Migrating sparganum captured on brain MRI

Zhenwen Yan and Meiguang Zheng

Neurology 2019;92:e1143-e1144

DOI 10.1212/WNL.0000000000007046

This information is current as of March 4, 2019

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/92/10/e1143.full
References	This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/92/10/e1143.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): All Infections http://n.neurology.org/cgi/collection/all_infections CME http://n.neurology.org/cgi/collection/cme MRI http://n.neurology.org/cgi/collection/mri
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: http://www.neurology.org/about/about_the_journal#permissions
Reprints	Information about ordering reprints can be found online: http://n.neurology.org/subscribers/advertise

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2019 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

