Teaching NeuroImages: Magnetic Susceptibility–Weighted Imaging Mapped the Migratory Route of a Paragonimus in Brain

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Figure 1 Paragonimus Egg and Tunnel Sign

(A) A brown oval paragonimus egg on sputum microscopy. (B) Coronal enhanced T1-weighted MRI shows the tunnel sign appearing as a hollow tube lesion (arrow).

A 53-year-old man with a recent history of left temporal lobe hemorrhage presented with weakness of the left upper limb for 4 days. Paragonimus eggs were detected in the patient's sputum (figure 1A). Workup revealed paragonimiasis, a lung flukeworm infection endemic to

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Figure 2 Magnetic Susceptibility-Weighted Imaging (SWI) Mapped the Paragonimus Track in Brain

(A) SWI shows a patchy hemorrhagic focus in the left temporal lobe. (B) SWI reveals a crescentic hypointense signal in the splenium of the corpus callosum (arrow), representing the left to right migratory track of the worm. (C) SWI demonstrates a cystic heterogeneous lesion in the right parietal lobe.

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East Africa, West Africa, and South America, which rarely involves brain.¹ Characteristic tunnel sign was visualized on brain MRI (figure 1B). Notably, susceptibility-weighted imaging revealed a migratory pattern of the parasite from the left temporal lobe to the right parietal lobe and resultant patchy hemorrhage (figure 2). Treatment with praziquantel resulted in favorable outcome without residual deficits.

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Appendix Authors

Name	Location	Contribution
Ke Yu, MD	Department of Neurology, The General Hospital of Western Theater Command, Chengdu, China	Data collection, drafting and revising the manuscript
Mingjie Zhang, MD	Department of Neurology, The General Hospital of Western Theater Command, Chengdu, China	Editing figures and revising the manuscript

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