Teaching *NeuroImages*: Giant cystic echinococcosis with unusual imaging manifestations

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Figure 1 Echinococcosis images

T1-weighted MRI of the spine (A–C) and enhanced MRI (B) demonstrate a single hypointense lesion in the left cerebral hemisphere with no perilesional edema and contrast enhancement.

A 6-year-old girl presented with a 3-month history of progressive left-eye strabismus and vision loss. MRI scan of the brain showed a single hypointense lesion in the left cerebral hemisphere with no perilesional edema or contrast enhancement (figure 1, A–C). At surgery, the lesion was shown to be a single large

parasitic cyst measuring approximately $7.0 \times 6.5 \times 6.0$ cm (figure 2, A–C). The patient underwent a complete resection and then was given antihelminthic therapy. This resulted in an uneventful recovery. Pathology confirmed a diagnosis of brain cyst with scolex. This imaging feature of giant cystic

Figure 2 Imaging of surgical specimens and histopathology

Surgical area (A) and resection specimens (B) show a white flocculent mass floating in the cystic fluid (black arrows); thick cyst wall exhibits milky. Pathology confirmed a diagnosis of cerebral cyst with scolex (C).

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echinococcosis is very unusual.¹ In the event of neurologic dysfunction or elevated intracranial pressure, emergent operative intervention should precede the administration of antihelminthic medications as the latter may weaken the cyst membrane and complicate resection. Gross total resection has advantages compared with nonsurgical treatment with antihelminthics.²

AUTHOR CONTRIBUTIONS

Dekang Nie: drafting/revising the manuscript, study concept or design. Jun Guo: study concept or design and study supervision. Liang Xia: analysis or acquisition of data. Jian Chen: revising the manuscript. Wei Shi: analysis or interpretation of the data. Guan Sun: analysis and interpretation of data.

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REFERENCES

1. Stojkovic M, Junghanss T. Cystic and alveolar echinococcosis. *Handb Clin Neurol* 2013;114:327–334.
2. Hajhouji F, Aniba K, Laghmari M, Lmejjati M, Ghannane H, Benali SA. Epilepsy: unusual presentation of cerebral hydatid disease in children. *Pan Afr Med J* 2016;25:58.

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