

Images in Infectious Diseases

Hydatid cyst in the teres major muscle and brain

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A 46-year-old male patient presented with a headache that persisted for 1 year. Physical examination revealed no abnormalities. Contrast-enhanced cranial computed tomography (CT), requested with a provisional diagnosis of a mass, revealed cystic lesions in both cerebral hemispheres, the largest of which was 2 cm in size, without contrast enhancement (**Figure 1**). Magnetic resonance imaging of the patient's brain revealed multiple round, multivesicular T1-hypointense and T2-hyperintense lesions in both cerebral hemispheres (**Figure 2**). These findings were significant with respect to hydatid cysts. Non-contrast thoracic CT was performed during the patient's general physical examination. A 22 × 10 mm hyperdense, septate cystic lesion was noted in the right teres major muscle (**Figure 3**). Postoperatively, a hydatid cyst was confirmed pathologically.

Cystic echinococcosis (hydatid disease) is a zoonotic parasitic disease caused by the ingestion of *Echinococcus granulosus* eggs that can form cysts anywhere in the body. The prevalence of the disease ranges from 0 to 79 cases/100,000 population¹. Hydatid cysts most commonly affect the liver (55–70%), followed by the lungs (18–35%). The incidence of the cerebral form is 1–2%², and that of the muscular form is approximately 1–5%³. Hydatid cysts should be considered in the differential diagnosis of well-defined cystic masses unresponsive to medical treatment in individuals from endemic regions.

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None.



FIGURE 1: Presence of cystic lesions in both cerebral hemispheres, the largest of which is 2 cm in size, without multivesicular contrast enhancement.

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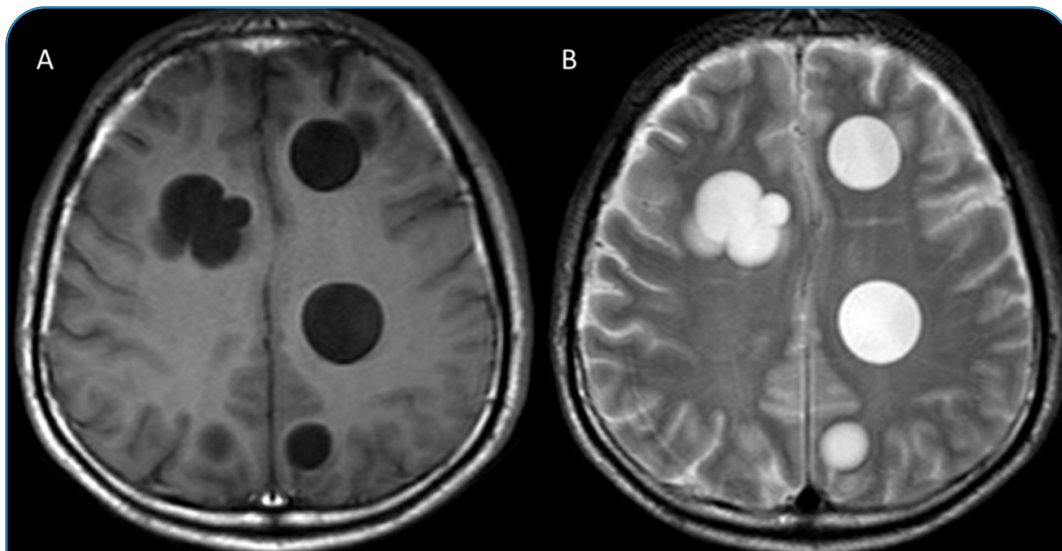


FIGURE 2: Magnetic resonance imaging of the patient's brain reveals multiple round, multivesicular T1-hypointense (A) and T2-hyperintense (B) lesions in both cerebral hemispheres.

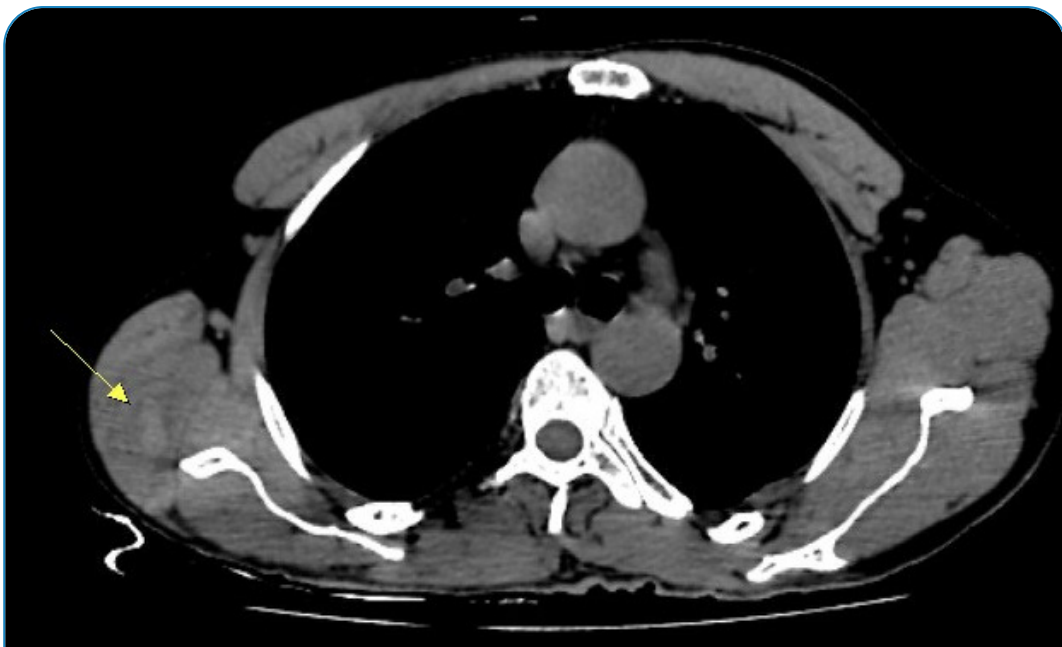


FIGURE 3: Radiological examination reveals a hyperdense, septate cystic lesion in the right teres major muscle.

REFERENCES

1. Şimşek S, Özmen CA. Unusual imaging characteristics of thoracic hydatid disease. *Radiol Bras.* 2022;55(2):128-33. Available from: <https://doi.org/10.1590/0100-3984.2021.0041>. PMID: 35414729; PMCID: PMC8993172.
2. Gautam S, Sharma A. Intracranial Hydatid Cyst: A Report of Three Cases in North-West India. *J Pediatr Neurosci.* 2018;13(1):91-5. Available from: https://doi.org/10.4103/JPN.JPN_141_17. PMID: 29899780; PMCID: PMC5982502.
3. Şimşek S, Hattapoğlu S. Intramuscular hydatid cyst in the lower extremity: report of three cases. *Rev Soc Bras Med Trop.* 2021;54:e02552021. Available from: <https://doi.org/10.1590/0037-8682-0255-2021>. PMID: 34431944; PMCID: PMC8405206.