



IMAGE ARTICLE

Incidentally Diagnosed Asymptomatic Primary Hydatid Cyst of Brain

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Abstract

Turkey is an endemic country to hydatid disease. The definite hosts of echinococcus are various carnivores, the common being the dog. Neurohydatosis is a rare presentation and primary cerebral involvement is even rarer. Intracranial cases become symptomatic depending on location, size and growth rate of the cyst. This is an interesting case of asymptomatic primary hydatid cyst diagnosed after a traffic accident.

Keywords

Hydatid cyst, Echinococcus, Neurohydatosis

Case Report

An 8-year-old boy who was living in countryside, was brought to ER because of vomiting due to head trauma. His neurological examination was normal. CT scan revealed a cystic lesion in right parieto-occipital region with approx. 5 cm diameter (Figure 1). By cranial MRI large cystic lesion with periferal enhancement was detected (Figure 2). Indirect hemagglutination was negative. Before surgery, 15 mg/kg/d albendazole treatment was administrated. Further examinations revealed no other involvement in body. Right parieto-occipital craniotomy performed and lesion was totally excised. Post-operative recovery was uneventful. In pathological examination, fibrous wall was excised and smooth semi-transparent hydatid cyst was seen (Figure 3). Albendazole treatment was continued. Cranial MRI at the post-op 2nd month revealed no pathological findings (Figure 4).

Comments

Albendazole is the first choice in hydatid disease but the primary treatment of intracranial hydatid cysts is surgery [1]. Primary cerebral hydatid cyst rarely occurs in pediatric population. In endemic countries hydatid cyst presentations may be more various than usual [2]. Specific radiological features play an important role in diagnosis of cerebral hydatid cases [1,2].

Conflict of Interest

None.

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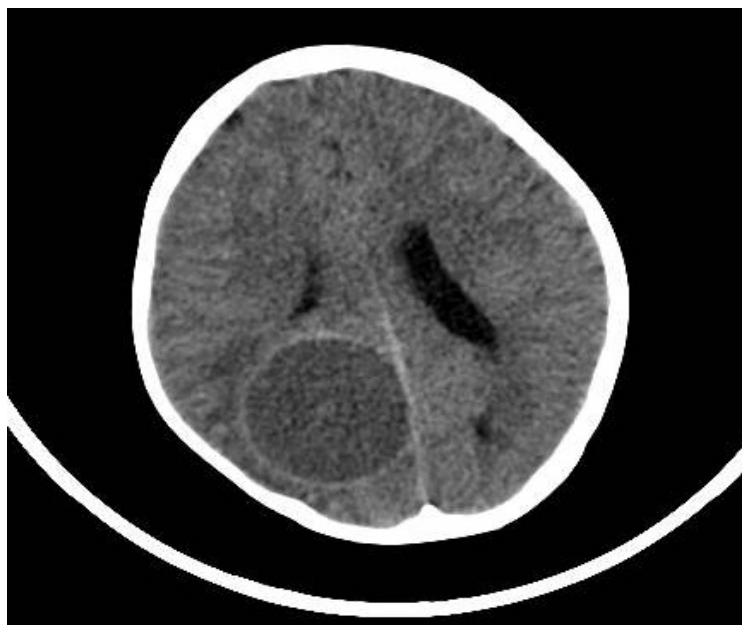


Figure 1: Right parieto-occipital cystic lesion next to falx cerebri.

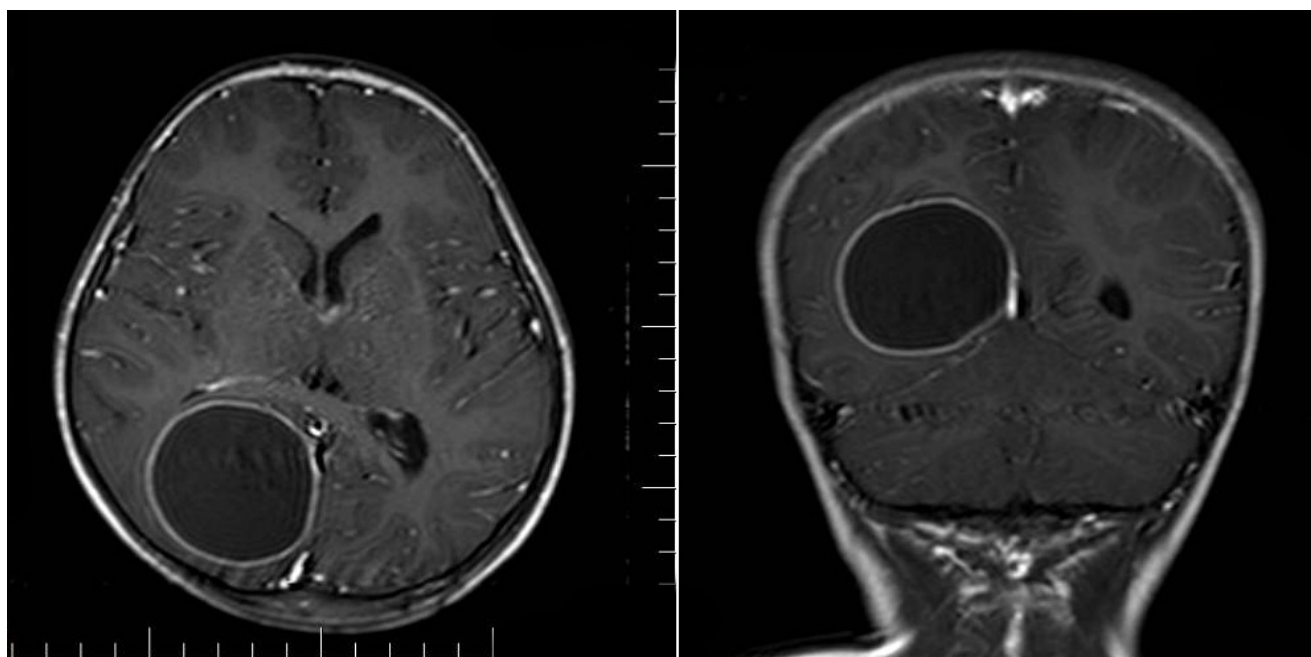


Figure 2: Cystic lesion, adherent to falx cerebri, with smooth margins and peripheral enhancement.

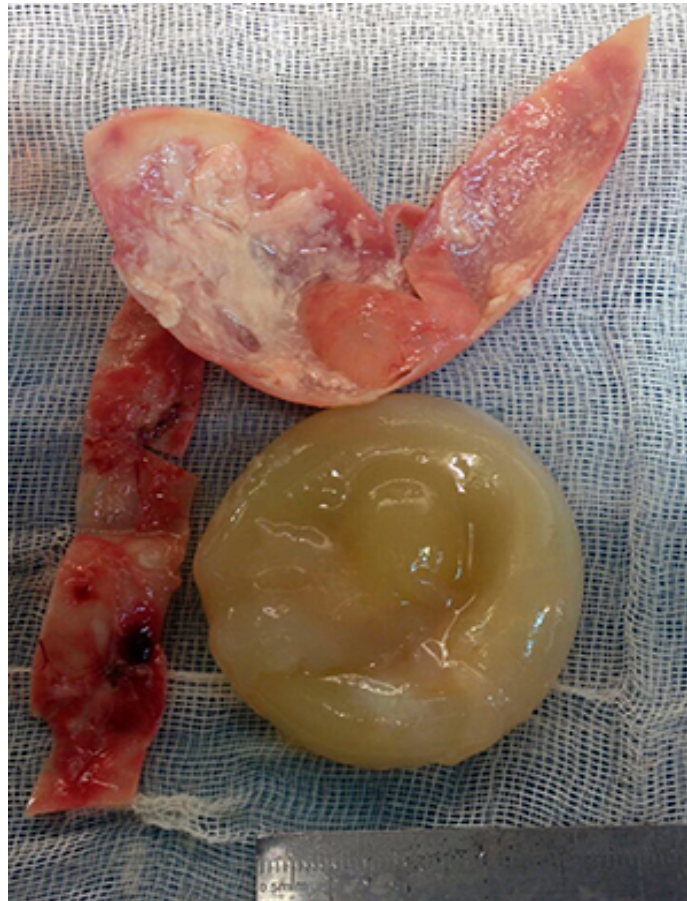


Figure 3: Semi-transparent hydatid cyst with dens fibrous wall.

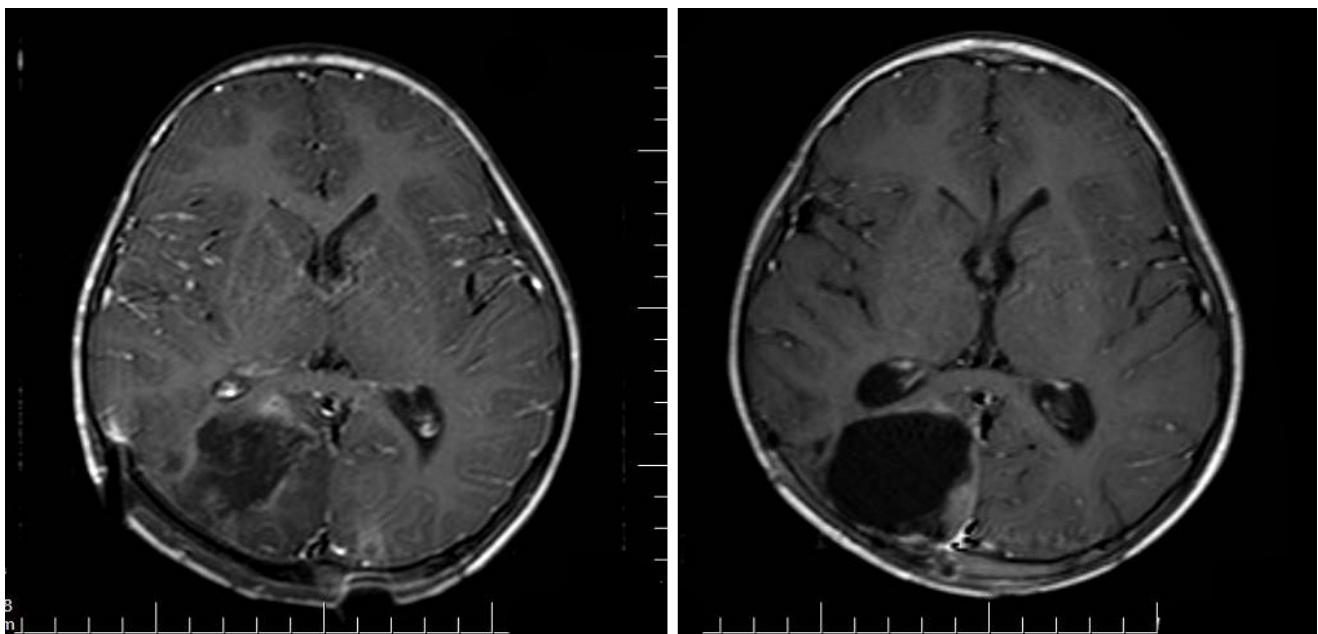


Figure 4: Cranial MRI at the post-op 2nd month.

References

1. Singounas EG, Leventis AS, Sakas DE, Hadley DM, Lampadarios DA, et al. (1992) Successful treatment of intracerebral hydatid cysts with albendazole: Case report and review of the literature. *Neurosurgery* 31: 571-574.
2. Senapati SB, Parida DK, Pattajoshi AS, Gouda AK, Patnaik A (2015) Primary hydatid cyst of brain: Two cases report. *Asian J Neurosurg* 10: 175-176.