Letter to the Editor

Primary giant intracranial extracerebral hydatid disease in a child

Madam, hydatid disease is a prevalent parasitic disease in the Middle east, Mediterranean countries, South America, North Africa and Australia.[1] It may affect any organ and tissue in the body, in particular the liver and lungs.[2] Intracranial hydatid cyst is classified as primary or secondary. The primary cysts are formed as a result of direct infestation of the larvae in the brain without demonstrable involvement of other organs.[3] Primary intracranial hydatid cyst is a very rare presentation of hydatidosis (1-2% of hydatid disease).[3,4] Intracranial extracerebral hydatid cyst is more common in the paediatric population. Its diagnosis is usually diffucult because of nonspecific complaints and unavailability of any diagnostic marker in a routine laboratory analysis.[1,5] The patients with intracranial hydatid cysts usually manifest with focal neurological deficit and features of raised intracranial pressure; the condition may be due to the large size of cystic lesion with mass effect or due to interference with pathway of cerebrospinal fluid (CSF) flow.[3,5] Computerized tomography and magnetic resonance imaging (MRI) of the brain are the first-line diagnostic procedures in hydatid disease.[5] The treatment of hydatid cyst is surgical and the aim of surgery is to excise the cyst without rupture to prevent recurrence and anaphylactic reaction.[1,3] A 6-year-old boy presented with complaints of headache, nausea, vomiting and giddiness since last three weeks. Five days before, he experienced a single episode of right focal convulsion in right upper limb and leg and subsequently generalized tonic-clonic fits and became unconscious. Neurological examination disclosed right hemiparesis and papilloedema. Axial T2-weighted MRI of the brain showed a large, hyperintense hemispherical cystic

Figure: Axial T2-weighted MRI of the brain showing a large, hyperintense hemispherical cystic lesion with a mild midline shift in the left frontal lobe.

lesion with a mild midline shift, involving the left frontal lobe without perifocal oedema (Figure). A differential diagnosis of cystic glioma or hydatid disease was considered. The patient was taken up for standard left frontal osteoplastic flap craniotomy. During surgery a firm cystic lesion was seen and was delivered from the cranium without rupture. Histopathological examination of the specimen confirmed the diagnosis of Echinococcus cyst. Albendazole treatment, 10mg/kg/day was initiated postoperatively for 1 month.

Hydatid disease is a widespread public health problem in developing countries. The possibility of hydatid disease, especially in endemic regions, should always be considered in the differential diagnosis of intracranial masses. The prognosis is excellent in intracranial extracerebral hydatid cyst cases treated with total removal of the cyst without rupture.

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