Growth of hydatid cysts evaluated by CT scanning after presumed cerebral hydatid embolism

Case report

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ALTHOUGH much is known about intracranial hydatid cysts, there are still some aspects not yet established about them, such as their rate of growth. It is well known that large intracranial hydatid cysts can be found in children; Nevertheless, in adults, 3 or 4 years at least are required for cysts to reach a large size. Some authors have suggested that the rate of growth of hydatid cysts in the brain is about 1 cm/year. We have recently confirmed this rate of growth in a case reported below.

Case Report

This 37-year-old man was operated on in October, 1976, for cardiac hydatid cysts, and 16 cysts were removed from the pericardium and myocardium. During this procedure, a few cysts ruptured into the left ventricle. After operation, a left hemiparesis appeared, indicative of hydatid embolism. Computerized tomography (CT) scanning was performed and was considered normal. One year later, a repeat CT scan showed a right frontoparietal infarction zone, related to the previous episode (Fig. 1 upper). The patient's hemiparesis improved during this time, with rehabilitation.

In October, 1981, motor deficit increased and the patient developed intracranial hypertension. A CT scan showed three cystic lesions, one of them within the previously established infarcted zone (Fig. 1 lower). Two separate craniotomies were performed.
Lism to the brain was documented by CT. It is accepted that one of the causes for multiple intracranial hydatid cysts is embolism from cardiac cysts rupturing into the left ventricle during cardiac surgery for echinococcosis. In our case, this was the logical source of the cerebral hydatid cysts and the cause of the hemiparesis after cardiac surgery. Considering the sequential CT studies and the size of the cysts removed, we can confirm the approximate growth rate of 1 cm/year or 5 cm/5 years as an admissible pattern for intracranial hydatid cysts in the adult.

FIG. 2. Operative photograph showing the right frontoparietal cyst. On the right side and below, an atrophic cortex due to the previous infarct can be seen.

week apart, and three hydatid cysts were completely removed (Fig. 2). Each cyst was approximately 5 cm in diameter.

Discussion

To our knowledge, this is the first report in which growth of cerebral hydatid cysts after hydatid embo-

References


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