THE MANAGEMENT OF HEPATIC HYDATID CYST CAVITY BY OVERLAPPING

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The obliteration of the cyst cavity after evacuation is a controversial procedure in hepatic hydatid disease. There is no ideal surgical technique which can be used in all hydatid cyst cavities.[1-7]

Since 1989 we have been using a new technique, which we call overlapping, in the treatment of suitable cases of hepatic hydatid cyst cavities. The technique depends on the obliteration of the cavity without drainage. After evacuating the hydatid material from the cavity, instillation of the cystic cavity is performed with scolecidal agent (silver nitrate solution, 0.5%). The cavity is opened along its long axis. The pericyst is prepared, and the upper edge is sutured to the bottom of the cavity with absorbable stitch (modified external collapse). Before doing this, if there is no possibility of operative ultrasonography, the cavity is punctured with a fine needle to evaluate any dangerous areas. Then the other edge of the pericyst is laid down beside the collapsed one and sutured to the former with the same technique. The term "overlapping" stems from this second procedure.

During the operation, we decide which pericyst will collapse and which one will overlap. Before overlapping, openings between the cavity and biliary tree should be found and if there are any, they should be secured. In cases of large and multiple openings, T-tube choledochostomy is necessary.

We applied overlapping to 31 of 43 hepatic hydatid cysts (ranging from 5 to 17 cm in diameter, with a mean of 12 cm) in 19 patients. Twenty-four of 31 cysts had partial pericystectomy before overlapping. Three cystic cavities were connected to the biliary tree. Because of a large connection, T-tube choledochostomy was added in one case.

We have not seen any complications, either infection or biliary fistula. The results of the obliteration of cavities were excellent in 15 cysts. There were no residual cavities in half of the cysts upon US and CT at the end of the first month. Small residual cavities in the other cysts disappeared completely in two months. The mean hospital stay was eight days.

Discussion

Each technique applied to hydatid cavities has both advantages and disadvantages.[2,4,5] For example, it is not possible to use omentoplasty, which is the most appropriate method in multiple cavities, in recurrent or in omentectomized cases, and in children and patients with small omental volume. Getting out of the cavity and the problems of suppuration are complications of omentoplasty.[4,5,8]

Overlapping leaves smaller residual cyst cavities behind, compared to introflection,[4] and is quite a reasonable technique for both small and large cysts situated peripherally. It is also adequate for central and narrow hepatic hydatid cavities. The cases bearing lemon-shaped and peripherally located cysts are more suitable for this technique. We prefer to use it in cavities of strong pericysts. It can also be used in partially calcified pericysts, as we did in one case.

So far we have not encountered any complication associated with obliteration of the cyst cavity by overlapping. While half of the cystic cavities were not visible on US and CT in early postoperative days, a small residual cavity in the others disappeared in the late postoperative days.

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