Primary hydatid cyst of peritoneum presented as abdominal lump: a rare presentation

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Introduction
Primary peritoneal hydatidosis is a rare condition, even in areas where hydatid disease is endemic. Although liver and lung are the organs most commonly involved, peritoneal echinococcosis, either primary or secondary, represents an uncommon but significant manifestation of the disease. We report a case of extrahepatic primary peritoneal hydatid in a patient, who presented with a lump in the lower abdomen. Surgical excision and postoperative treatment with albendazole were effective in controlling the disease and preventing a recurrence.

Case Report
A 45-year-old female presented with lump in lower abdomen gradually increasing in size since last 6 months, associated with dull aching pain. There were no complaints of nausea, vomiting or any bowel and bladder habits. Routine hematological and biochemical parameters were normal. Ultrasonography of abdomen revealed a large hypoechoic mass with echogenic septations in the lower abdomen (Fig. 1). Contrast-enhanced computed tomography (CECT) of abdomen and pelvis revealed a huge cyst, 30 × 25 cm in size (Fig. 2) in lower abdomen. Radiography of chest was normal. Initial differential diagnosis of (1) Hydatid cyst of peritoneum, (2) Ovarian cyst was made based on findings of USG and CT abdomen –pelvis. Markers of ovarian tumor were negative.

On Exploratory laparotomy, there was a large cyst (50 × 25 cm) arising from pelvic peritoneum (Fig. 3A and B). There were no similar cystic masses in any other abdominal viscer. Excision of the cyst was done without any spillage. Histopathological examination showed cyst wall with a laminated membrane and inner germinal layer containing...
Primary peritoneal hydatidosis is rare and has been reported to occur in 2% of all abdominal hydatids [2]. Intraperitoneal hydatid cysts are usually secondary to the rupture (spontaneous or accidental at surgery) of a primary hepatic, splenic, or mesenteric cyst [1]. A solitary cyst in the pelvic cavity is considered as primary when no other cysts are present. In such a case, the hydatid embryo gains access to the pelvis by hematogenous or lymphatic route [3]. Pelvic hydatid cysts usually present as a nonspecific mass with pressure effects on adjacent organs such as the rectum and urinary bladder. Rarely, they can cause obstructed labor, obstructive uropathy, and renal failure. Sometimes, they can rupture spontaneously [3].

Serology and imaging are the main tools for establishing diagnosis. Ultrasound is the preferred first-line imaging but CECT gives more precise information regarding the morphology (size, location, state of surrounding structures, and number) of the cyst. Drug treatment with albendazole has been found to be successful in a proportion of cases, but drug therapy is generally not used as the primary treatment except in cases where the patient is not fit for surgery or the cyst size is smaller or deeply located. Surgery is the most effective treatment. Combination of preoperative albendazole therapy, surgery and postoperative albendazole therapy is a useful regime. Albendazole suppresses the development of hydatid cysts following intraperitoneal inoculation of protoscolices.

Clinical Message

The incidence of primary hydatid cyst of peritoneum is 2%. It can present as a palpable abdominal lump. Clinically and radiologically, one has to differentiate it from cystic ovarian tumor. It is worth keeping peritoneal hydatid disease as a differential in ultrasonographically diagnosed pelvic cystic lesions.

Conflicts of Interest

None declared.

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