Primary peritoneal echinococcosis masquerading as an ovarian cyst


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ABSTRACT

We report a case of primary peritoneal hydatid cyst, diagnosed incidentally during an operation performed for suspected ovarian cyst. Literature regarding occurrence, mechanism, and management of this entity is discussed.

Key words: Echinococcosis, hydatid cyst, ovarian cyst, peritoneal cavity

CASE REPORT

A 45 year old woman presented with lower abdominal pain for 2 years. The pain was mild, continuous, and not influenced by activity or intake of food. There was no history of altered bowel habits, vomitings, anorexia, weight loss, fever, jaundice, or rashes. She had burning sensation during micturition, with increased frequency. She reached menopause 2 years back, and had no history of postmenopausal bleeding. She gave no history of contact with sheep dogs. On examination, the patient was obese with normal temperature and vital signs. No rash or lymphadenopathy was found. Abdominal examination revealed slight fullness, with a nontender illdefined mass in the lower abdomen. No guarding or shifting dullness was found. Bowel sounds were normal. Anorectal and vaginal examinations were normal. Radiographs of chest and abdomen, and hematological tests were normal. Urine was positive for albumin and WBC. Abdominopelvic ultrasound showed a large 14x16x17 cms, unilocular, echolucent, thin- walled cystic mass, that arose from the pelvis and extended up to the level of umbilicus [Figure 1]. Right ovary was not identified. Left ovary and uterus appeared normal, as did both kidneys, spleen, and pancreas. No free fluid was detected in the peritoneal cavity. Gall bladder had multiple stones. Liver and biliary tree were normal. She was explored with the initial diagnosis of right ovarian cyst with cholelithiasis. At operation, uterus and both ovaries were found normal. A large thin- walled cyst, occupying whole of the lower abdomen and pelvis was present. The cyst was attached mainly to the sigmoid mesocolon. The cyst ruptured during excision, with spillage of clear fluid in the peritoneal cavity. A detached laminated membrane inside the cyst revealed the presence of the hydatid cyst. Intravenous hydrocortisone succinate, 200 mg was given to avoid anaphylaxis. The peritoneal cavity was irrigated thoroughly with saline solution, and tube...
Figure 1: Abdominopelvic ultrasound showing unilocular, echolucent, thin walled cyst

drain was left in place. Grossly, no cyst remnant was left. Liver and spleen were normal. There was no obvious primary intraperitoneal source that accounted for initial seeding of the cyst in this patient, making primary peritoneal hydatid cyst more likely. Cholecystectomy was performed after excision of the cyst. The patient remained stable throughout the surgery. Histopathological examination of the cyst was consistent with hydatid cyst, showing laminated and germinal layers of the cyst [Figure 2]. The postoperative period was uneventful. After discharge, she received adjuvant albendazole therapy at a dose of 800 mg per day, in cycles of 28 days, for 3 cycles with no adverse effect. She was reassessed for evidence of any primary, by Computed Tomography (CT) of chest and abdomen, which revealed no abnormality. Enzyme linked immunosorbent assay (ELISA) for antiechinococcal antibodies, performed 7 months after surgery, was within normal range, suggesting complete removal of the disease. The patient was well at the last follow up, 12 months after the surgery.

DISCUSSION

Peritoneum is the most common site for secondary echinococcosis.[5] Primary peritoneal echinococcosis is rare, and has been reported to occur in 2% of the all abdominal hydatid disease cases.[6,7] The mechanism of primary peritoneal infestation is not clear. Dissemination via lymphatic[2,3] or systemic[4] circulation has been implicated as a possible route to produce primary hydatid disease outside the liver and lungs. Clinical manifestations vary with the site and size of cyst, and result from complications due to mass effect of enlarging abdominal cyst. The common symptoms are atypical abdominal pain, distention, intestinal obstruction, urticaria, urine hesitation, and palpable mass with large cysts.[6,7] In endemic areas, the disease is recognized promptly, but in non-endemic areas, it usually is a surprise finding as in this case. In a majority of cases, imaging together with serology will yield diagnosis.[1] Sonography is the diagnostic procedure of choice, and when available, CT is superior for detection of extrahepatic disease.[8] Complement fixation test is positive in approximately 65% of patients, and Indirect hemagglutination test and ELISA have approximately 85% sensitivity.[9] Surgery is the definitive treatment, and offers best hope for cure or palliation for peritoneal disease. Although asymptomatic, small cysts may be treated with antihelminthics, large and symptomatic cysts should be treated surgically to avoid complications due to enlarging cyst.[6,7] Complete excision is the treatment of choice, while drainage and wide unroofing of cysts is safer, and an effective alternative in cysts adherant to the intraperitoneal viscera. In case of intraperitoneal spillage, antihelminthic drugs should be used.[6]

REFERENCES

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