A 40-year-old woman presented with gradual heaviness and distension of whole abdomen for 4 years. Abdominal distension is associated with anorexia and nausea and occasional vomiting. She gave no H/O abdominal pain, alteration of bowel habit hematemesis, melena and weight losss. She gave H/O occasional non documented low grade fever, which is not associated with chills and rigor and subside spontaneously. She denied any H/O jaundice or contact with TB patient.

On examination, she was mildly anemic, with large protruding abdomen, non-oedematous, non-icteric, not cyanosised. She had no lymphadenopathy. Her vitals were normal. Abdomen was soft, non-tender with multiple well circumscribed intraabdominal lump of variable size, the largest one measured about 6×6 cm, surface was smooth, not fixed with underlying structure and overlying skin. Spleen was enlarged 4 cm from left subcostal margin along left anterior axillary line toward right iliac fossa.

Her investigations were as following, Hb% 9.70gm.dl, WBC 11,000/Cmm, Eosinophil count 38%. PBF: combined deficiency anemia with eosinophilia. S. LDH 320 U/L, SGPT 27 U/L, S. creatinine 0.61mg/dl, USG of Whole abdomen multiple cyst in liver, spleen (largest one 96×63mm) and mesentery (largest one 84×82mm). CT scan of Whole abdomen shows multiple cyst of variable size in liver spleen and intra-peritoneal cavity- possible hydatid cyst. Echinococcus granulosus antibody >1:512 (positive).

Though surgery is the treatment of choice in this case, she was treated with albendazole 400mg twice daily for 4 weeks then after interval of 2 weeks again for 4 weeks. This cycle repeated for 6 times and advice for follow up.

Fig 1&2: CT scan of whole abdomen, showing multiple cyst in liver, spleen, ovary and intra-peritoneal cavity.
Hydatid disease (HD) is a parasitic infection caused by the cestode tapeworm Echinococcus granulosus. Humans get infected either by contact with the definitive host or by consuming vegetables and water contaminated with the hydatid ova.

Most of the people acquire the disease during their childhood but do not present with the clinical signs and symptoms until late adulthood. In humans the hydatid disease commonly involves the liver (75%) and the lungs (15%). The remaining (10-15%) of the cases include the other regions of the body. These atypical and rare presentations of the disease may be seen in kidneys (3%), usually the upper and the lower pole of the kidney may be involved. The spleen may be involved in about (4%) of the cases and is associated with splenomegaly, fever and abdominal pain. The disseminated intra-peritoneal hydatid disease is a very rare finding. Most of these cases are the result of traumatic or surgical rupture of a hepatic, splenic, or mesenteric cyst. The prevalence of peritoneal hydatid cysts in cases of abdominal hydatid disease is approximately 13%. In our case the patient had already undergone three laparotomies and it was likely that these findings may associated to previous surgical rupture, although spontaneous rupture of micro cysts into the peritoneum may also occur in about 12% of the cases. The hydatid cysts involving the entire peritoneal cavity is called peritoneal hydatidosis.

Ultrasonography (USG) is the first line of screening for abdominal hydatidosis and it is especially useful for detection of cystic membrane, septa, and hydatid sand. A hydatid cyst typically demonstrates a high attenuation value at unenhanced CT even without calcification. There are different types of serological tests which can be carried out for the diagnosis, screening and follow up of patients with hydatid disease. These include the immunoelectrophoresis, enzyme-linked immunosorbent assay (ELISA), latex agglutination and indirect haemagglutination (IHA) test. The diagnosis of HD can thus be established with the help of radiologic and serologic findings.

Surgery remains the best curative or palliative treatment for peritoneal hydatidosis although anthelmintics are considered effective alternative for the treatment of small and asymptomatic cysts. Surgical removal of the cyst is customized to each patient depending on the patient’s general condition, the number and localization of cysts, and the surgeon’s expertise. Surgical cure is to be completed by pharmacologic treatment with the aim of avoiding a relapse.

References

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