MDCT Depiction of Spontaneous Rupture of Hepatic Hydatid Cyst with Peritoneal Hydatidosis

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A 30-year-old female patient presented with vague abdominal pain and distension for one month. Ultrasound showed multiple complex hepatic cysts and multiple diffusely scattered cystic lesions the peritoneal cavity. Contrast enhanced computed tomography of abdomen for. Contrast enhanced multidetector computed tomography (MDCT) scan of abdomen was obtained on 128 slice MDCT scanner (Ingenuity CT, Philips Healthcare, Cleveland, OH) which showed multiple complex cystic lesions in right lobe of liver with many showing cyst within cysts appearance and some showing areas of calcification. One of the cysts in segment VIII showed evidence of rupture with extension into subphrenic region (Figure 1). Similar well defined complex cystic lesions were seen diffusely scattered in peritoneal cavity and in bilateral adnexal regions (Figure 2). Based on typical MDCT findings, diagnosis of multiple hepatic hydatid cysts with spontaneous rupture and secondary peritoneal hydatidosis was made. Patient’s hydatid serology was positive. Patient was otherwise normal without any clinical signs of peritonitis, allergy or anaphylaxis. Diagnosis was confirmed at the time of exploratory laparotomy.

Hydatid disease is caused by Echinococcus granulosus and is endemic in many countries. Humans are its accidental hosts the primary host being dogs and intermediate hosts being sheep and cattle. Humans are infected by its larval form when them come in contact with products in contact with infected dog’s faeces.¹

Liver is the most common organ affect by hydatid disease. Involvement of peritoneal cavity is rare and can due to rupture of hepatic hydatid cyst into peritoneal cavity. The rupture is more commonly post traumatic but can also be spontaneous without any definite inciting cause as seen in our
The rupture into peritoneal cavity is a potentially serious condition and may present with severe abdominal pain or with features of anaphylaxis or allergy. However, the rupture may be asymptomatic or with indolent course when diagnosis is made at a later time. The treatment of peritoneal rupture of hydatid cyst is primarily surgical to achieve clearance of peritoneal cavity, to treat rupture hepatic lesion. Post-operative medical treatment in the form of albendazole has been recommended for at least 3 months to prevent recurrence of the disease.

References