Primary Peritoneal Hydatidosis: Clinically Mimicking Carcinoma Of Ovary

R Godara, A Dhingra, V Ahuja, P Garg, J Sen

Citation

R Godara, A Dhingra, V Ahuja, P Garg, J Sen. *Primary Peritoneal Hydatidosis: Clinically Mimicking Carcinoma Of Ovary*. The Internet Journal of Gynecology and Obstetrics. 2006 Volume 7 Number 2.

Abstract

Hydatid disease (HD) is a world wide zoonosis produced by larval stage of Echinococcus. There is paucity of literature on specific findings related to various complications and unusual anatomic locations. Peritoneal echinococcosis is almost always secondary to hepatic disease, although occasional cases of primary peritoneal hydatid disease have also been reported. Peritoneal echinococcosis usually goes undetected until cysts are large enough to produce symptoms. CT scan is modality of choice in detecting this disease. The unusual clinical presentation of a case of primary peritoneal hydatid disease compelled authors to bring it to the literature to enhance clinical experience of those dealing such problem.

CASE REPORT

A 48 yrs old female presented with gradually increasing abdominal distention of two years duration. Anorexia and weight loss were associated complaints. There were no jaundice, bowel or bladder complaints. On clinical examination the distended abdomen was soft, non tender, no shifting dullness and multiple small, firm nodular swellings in abdominal cavity with restricted mobility and minimal movement with respiration (Fig 1). Routine blood investigation showed eosinophilia of 18% and raised ESR (36 mm^{1st} hr.) USG abdomen showed multiple thin walled cystic swellings in peritoneal cavity varying in size (1-10cm) involving liver spleen, mesocolon, retroperitoneum, omentum, pouch of Douglas, lesser sac and broad ligament and ovaries. However CT abdomen (Fig 2 &3) suggested possible diagnosis of carcinoma ovary.

Figure 1

Figure 1:



Figure 2

Figure 2:



Figure 3

Figure 3:



Serologic work up was negative for E. granulosus and serum CA-125 was within normal limit. Abdominal exploration revealed multiple cystic swellings with daughter cysts involving every intraabdominal organ except intestine (Fig 4). Debulking surgery (Fig 5) followed by chemotherapy with praziquantel and albendazole made uneventful but prolonged recovery. Patient is asymptomatic at eight months follow up.

Figure 4

Figure 4:







DISCUSSION

More than 2000 yrs ago human echinococcus disease was described by Hippocrates with the particular term "Liver filled with water". HD is endemic in many parts of world including India₁. Most frequently it affects liver (75%), Lung (15%) and other anatomic locations in 10%₂. However no organ is immune to affection. Peritoneal HD is almost always secondary to hepatic disease, although some unusual cases of primary peritoneal hydatidosis have been described. The overall frequency of peritoneal disease in cases of abdominal echinococcosis is approximately 13%₃.

Diagnosis of HD is usually radiological and aided by serological testing. USG is the first line of screening for abdominal hydatidosis. Sonographic appearance of HD may vary. The cyst wall usually manifests as double echogenic lines separated by a hypoechogenic layer. Simple cysts don't demonstrate internal structures although multiple echogenic foci due to hydatid sand may be seen. Detachement of endocyst from pericyst may appear as floating membranes inside cavity. CT Scan best demonstrates cyst wall calcification and cyst infection. Wider field of view and better delineation of extent of disease as well as cyst wall make C.T scan imaging modality of choice in peritoneal seedling₄. It is also a useful modality to assess response to treatment. In diffuse peritoneal HD, medical management is preferred. The combination therapy with albendazole and praziquantel is more effective than either agent alone⁵. Thickening, calcification of wall, reduction in size and number can be taken as therapeutic response on follow up CT Scan5. HD may be confused with cystadenocarcinoma ovary. A preliminary diagnosis by either cytology and fine needle aspiration may not always be helpful as the thick mucin aspirated with poor cellularity could mimic the laminated membrane of hydatid and could be easily misinterpreted as ectocyst of HD. Familiarity with such

atypical manifestations of HD may be helpful in the sense that such patients are explored and not discarded merely considering them as advanced carcinoma. Although literature describes medical treatment as the first modality for primary peritoneal hydatidosis, it would be a part of contention for such case, keeping in view the large size and associated distressing symptoms.

CORRESPONDENCE TO

Rajesh Godara 58/9J, Medical Enclave Rohtak (Haryana) India. Email : drrajeshgodara@yahoo.co.uk

References

 Katan VB.Intrabiliary rupture of hydatid cyst of liver.Ann. Royal College of surgeons of England.1977:59;108-14.
King CH. Cestodes(tapeworms) In :Mandell GL, Benett JE, Dolin R. Principles and practice of infectious diseases.
4th ed. New York,NY:Churchill Livingstone, 1995; 2544-2553.

3. Ivan Pedrosa, Antonio Saiz, Juan Arrazola, Joaquin Ferreiros, Cesar S. Pedrosa. Hydatid disease : Radiologic and Pathologic features and complications. Radiographics 2000;20:795-817.

4. Miron D, Kawar B, Lumelsky D, Spiegel R, Horovitz Y. Encysted peritoneal hydatidosis in a child-the effectiveness of pre-operative therapy with a combination of praziquantel and albendazole. Ann. Trop Med Parasitol.2005;99(6):577-82.

Author Information

Rajesh Godara, MS, FAIS, FICS

Associate Professor, Department of Surgery, Post Gradate Institute of Medical Sciences

Ashish Dhingra, M.S.

Senior Resident, Department of Surgery, Post Gradate Institute of Medical Sciences

Vivek Ahuja, M.S.

Senior Resident, Department of Surgery, Post Gradate Institute of Medical Sciences

Pradeep Garg, M.S., D.N.B.

Professor, Department of Surgery, Post Gradate Institute of Medical Sciences

Jyotesna Sen, M.D.

Professor, Department of Radiodiagnosis, Post Gradate Institute of Medical Sciences