Peritoneal Hydatidosis

F Parray, M Gagloo, A Bhat, N Chowdri, M Noor

Citation

F Parray, M Gagloo, A Bhat, N Chowdri, M Noor. *Peritoneal Hydatidosis*. The Internet Journal of Surgery. 2006 Volume 9 Number 2.

Abstract

CASE REPORT

A 22 year old unmarried female presented to the surgical OPD of SKIMS Medical College with history of progressive and painless distension of the abdomen of 8 months duration. There were no symptoms related to gastrointestinal or genitourinary system. Her menstrual cycles were normal and there was no history of exposure to pets. There was no past history of any surgery.

She was well built with nothing significant on General Physical, Chest and Cardiovascular examination. Abdominal examination revealed distended lower abdomen with a mass palpable which was non tender, spherical and had size of 20 & 25 cms in vertical & horizontal dimensions. The mass was mobile in horizontal direction only. It had rounded margins and inferior margin was not felt.

Her Hemoglobin was 9.3 gm/dl. Kidney & Liver Function tests were normal. Hydatid serology was weakly positive. CA-125 was negative. A CT of the abdomen revealed multiple intra-abdominal cysts with one large cyst extending from subhepatic region downwards (Fig. 1, 2 & 3).

Figure 1

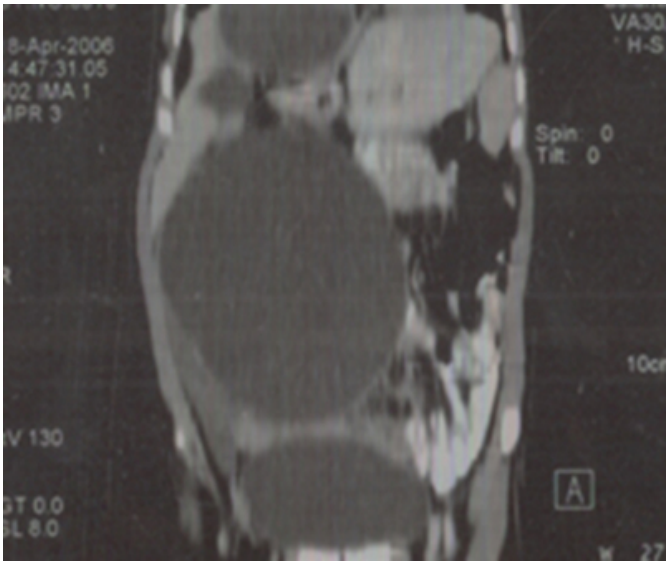


Figure 2

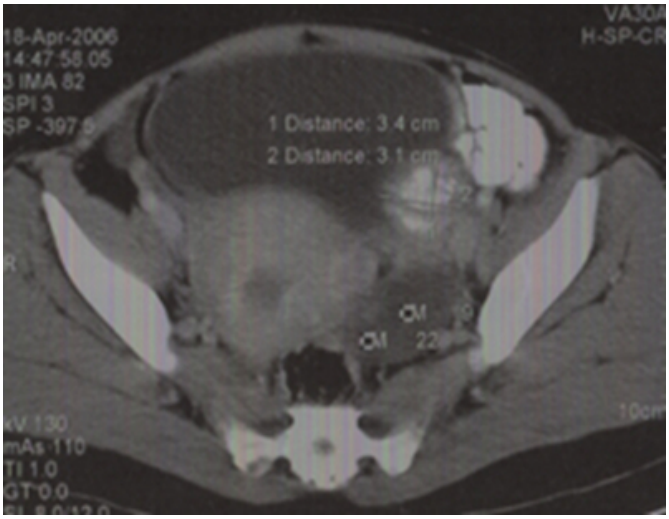
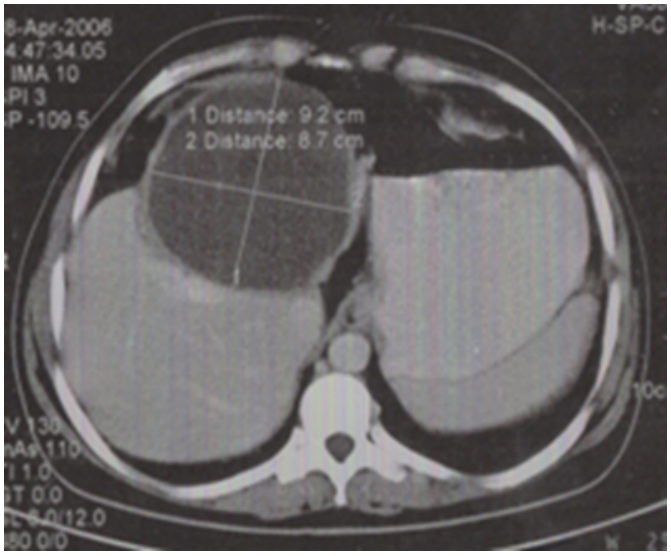


Figure 3



At laparotomy the subhepatic cyst was identified as huge ovarian cyst arising from right ovary with one and a half turn around its pedicle (Fig. 4).

Figure 4

Right oopherctomy was performed. There were two hydatid cysts, one in left lobe of liver (Fig. 5) managed by left partial pericystectomy and capittonge.

Figure 5

Another Hydatid cyst in Sigmoid mesocolon (Fig. 6) was marsupilized and drained to the exterior. The postoperative period was uneventful and the patient was discharged on Albendazole. The patient is recurrence free 6 months after surgery.

Figure 6

DISCUSSION

The earliest mention of Hydatid disease dates back to Hippocrates who used the term “Liver filled with water”. Famous Arab Physician Al-Rhazes wrote about the disease more than one thousand years ago [1]. It is a zoonotic illness caused by cysts of Echinococcus granulosis, whose primary host is the dog. Human disease occurs when tapeworm ova are ingested by humans either by consuming unwashed and uncooked vegetables or as a result of close contact with a working or a pet dog [2]. Although liver [75% of cases] and lungs [15% of cases] are the organs most commonly involved, peritoneal hydatidosis represents an uncommon but significant manifestation of the disease [3]. Peritoneal cavity involvement in Hydatid disease is found in 10 – 16 % cases [4].

Peritoneal hydatidosis could be either primary or more frequently secondary to hydatid cysts in Liver or rarely in Spleen. Primary peritoneal hydatidosis is rare, and has been reported to occur in only 2 percent of all abdominal hydatid disease cases [5]. The mechanism of peritoneal infestation is not clear. Dissemination via lymphatics [6] or systemic circulation [7] has been implicated as a possible route to produce primary hydatid disease outside the liver or lungs.

Secondary Peritoneal Hydatidosis is recorded in 16% of patients admitted for liver Hydatid [8]. It is almost always secondary to Hepatic Hydatid disease related to seeding from spontaneous rupture of Hepatic cyst or rarely splenic cyst into peritoneum or spillage of cyst fluid during previous surgery [9].Of the three types of rupture ie contained, communicating or direct rupture, the latter has greatest clinical consequences including anaphylaxis, Hydatid dissemination and secondary Bacterial infection or peritonitis[10]. The incidence of anaphylaxis and secondary hydatidosis resulting from cyst fluid spillage during surgery have been reported to be 2-25% in different series[11,12].

Diagnosis of peritoneal hydatidosis is usually radiological and aided by serological testing. USG is the first line of screening and leads to diagnosis in 95% cases[13]. However CT Scan gives wider field of view and correct topographical evaluation for radical surgical treatment[13]. It is also used to assess response to medical therapy by showing changes in size, number, and density of lesion. Indirect Heamagglutination test & ELISA have approximately 85% sensitivity [14].

Surgery remains the best curative or palliative treatment for peritoneal echinococcosis, although antihelminthics can be effective alternative for the treatment of small and asymptomatic cysts[3]. Combination therapy of Albendazole and Praziquantel is more effective than either agent alone [15]. Preoperative high dose Mebendazole have also been used to achieve shrinkage of multiple cysts so as to enable surgery [16].

Complete removal of the cysts is the gold standard, but its feasibility is related to location of the cyst [11]. Drainage and wide unroofing of cysts is safer and effective alternative in cysts adherent to the intraperitoneal viscera. In case of intraperitoneal spillage, antihelminthic drugs should be used [3].

CONCLUSION

The case illustrates that peritoneal hydatidosis should be considered in differential diagnosis of abdominal lumps in endemic areas. One should look for cysts in other areas of peritoneal cavity while performing surgery of hepatic hydatid and also put some emphasis on avoiding spillage of hydalid fluid during surgery and proper use of scolicidal agents and if it has occurred use antihelminthics to avoid secondary peritoneal echinococcosis.

CORRESPONDENCE TO

Dr. Fazal .Q. Parray 44- Rawalpora, Govt. Housing Colony [Sanat Nagar], Srinagar. 190005. J&K , INDIA. Telephone : 0194-2433433. E-mail : fazlparray@rediffmail.com

References

1. Katan YB. Intrabiliary rupture of hydatid cysts of liver. Ann Royal College of Surgeons, England 1977; 59: 108-14.
2. Bannister B, Begg N, Gillespie S. Infectious disease: Second Edition, Blackwell Science, UK 2000; 506.
3. Karavias DD,Vagianos CE, Kakkos SK, Panagopoulis CM. Peritoneal echinococcosis. World J Surg 1996; 20[3]: 337-40.
4. Prousalidis J, Tzardinoglouk K, Katsokis C, Aletras H. Uncommon sites of hydatid disease. World J Surg 1998; 22:17-22.
5. Balik AA, Celebi F, Basoglu M et al. Intrabdominal extrahepatic echinococcosis. Surg Today 2001; 31: 881-84.
6. Iuliono L, Gurgo A, Polettina E, Gualid G et al. Musculoskeltal and adipose tissue hydatidosis based on the iatrogenic spreading of cystic fluid during surgery. Report of a case. Surg Today 2000; 30:947-49.
7. Astar-cioglu H, Koidor MA, Toplak O, Terzic C et al. Isolated mesosigmoidal hydatid cyst as an unusual cause of colonic obstruction. Report of a case. Surg Today 2001; 31: 920-22.
8. Vara-Thorbeck C, Vara-Thorbeck R. Peritoneal echinococcosis. Zentrabl Chir 1986; 111[6]: 980-86.[German]
9. Pedrosa I, Saiz A, Arrazola J et al. Hydatid disease: radiologic and pathologic features and complications. Radiographics 2000; 20: 795-817.
10. Lewall DB. Hydatid disease: biology, pathology, imaging and classification. Clin Radiol 1998;53:863-74.
11. Karavios DD, Vagianos CE, Bouboulis N, Rathios S, Androulakis J. Improved techniques in the surgical treatment of hepatic hydatidosis. Surg Gynecol Obstet 1992; 174: 176-80.
12. Langer JC, Rose DB, Keystone JS, Taylor BR, Langer B. Diagnosis and management of hydatid disease of liver: a 15 year North American experience. Ann Surg 1984; 199: 412-17.
13. Daali M, Hassida R, Zoubir M, Had A, Hajji A. Peritoneal Hydatidosis: a study of 25 cases in Morocco. Sante 2000; 10[4]: 255-60.[French]
14. Biffin AH, Jones MA, Palmer SR. Human hydatid disease, evaluation of an ELISA for diagnosis, population screening and monitoring of control programmes. J Med Microbiol 1993; 39: 48-52.
15. Mohammed AE, Yasawy MI, Karawi MA. Combined Albendazole and Praziquantel versus Albendazole alone in treatment of hydatid disease. Hepato-Gastroenterol 1998; 45: 1690-94.
16. Moller S, Kairies M, Krause BT. Echinococcosis-a case report & review of the literature. Zentralbl Gynakol 1998;

120[2] :79-82.[German]

Author Information

Fazal Q. Parray, M.S.
Associate Professor, Department of General Surgery, Sheri-Kashmir Institute Of Medical Sciences, Medical College

Mushtaq A. Gagloo, M.S.
Senior Resident, Department of General Surgery, Sheri-Kashmir Institute Of Medical Sciences, Medical College

Asif Hamid Bhat, M.S.
Senior Resident, Department of General Surgery, Sheri-Kashmir Institute Of Medical Sciences, Medical College

Nisar A. Chowdri, M.S.
Additional Professor, Department of General Surgery, Sheri-Kashmir Institute Of Medical Sciences, Medical College

M. Muzamil Noor, M.B.B.S.
Junior Resident, Department of General Surgery, Sheri-Kashmir Institute Of Medical Sciences, Medical College