

A rare case of primary disseminated abdominal hydatidosis

Sandip Pattanshetti¹, Nishith Shetty^{2*}

^{1,2}Sr. Resident, Department of Radiodiagnosis, Kasturba Medical College, Manipal, INDIA.

Email: shettynishith100@yahoo.com

Abstract

Primary peritoneal hydatidosis is rare and accounts for 2% of all abdominal hydatidosis. Very few cases are reported in literature so far. We report a case of a 46 year old woman presented with complaints of pain abdomen and recurrent fever of one month duration. On physical examination abdomen was distended and a mass was palpated in the lower abdomen and left lumbar region. Contrast-enhanced CT scan of the abdomen showed multiple intra peritoneal cystic lesions with minimally enhancing walls and similar lesions in liver and spleen. Cysts were excised and pathological analysis was consistent with hydatid cysts.

Keywords: Primary disseminated abdominal hydatidosis, hydatid cysts, peritonealhydatidosis.

*Address for Correspondence:

Dr. Nishith Shetty, Mallika Extension, Opp. G.K. Pharma, Kadri Kambla road, Mangalore – 575004, Karnataka, INDIA.

Email: shettynishith100@yahoo.com

Received Date: 04/07/2014 Accepted Date: 14/09/2014

Access this article online

Quick Response Code:	Website: www.statperson.com
	Volume 4 Issue 4

CASE REPORT

A 46 year old woman presented with complaints of pain abdomen and recurrent fever of one month duration. Patient was apparently asymptomatic till one month back when she developed insidious on set of pain abdomen which was gradually progressive and predominantly in the lower half of abdomen. Patient also complain edofintermittent episodes of low grade fever of the same duration. No associated loss of weight/appetite. No past history of similar complaints or surgery was documented. Patient was evaluated in a peripheral hospital for the same complaints and as apart of the work up an ultra sound of the abdomen was performed which was reported as multiple mesentericcysts. Patient was referred to our hospital for further management. On physical examination abdomen was distended and a mass was palpated in the lower abdomen and left lumbarregion.

Laboratory evaluation revealed borderline elevation of total leucocyte count (11,000 cells per microliter) and a differential eosinophil count of 11.6%. Rest of the laboratory investigations were within normal limits. Patient underwent a contrast-enhanced CT scan of the abdomen which showed multiple intra peritoneal cysticlesions with minimallyenhancing walls (figures 1 and 2). The largest lesion was seen in the right lumbarregion. Internal floating membranes were seen in one of the cysts in the infrasplic region (figure 3).Similar cystswere also seen embedded in the liver and spleen (fig4). None of the cysts showed internal calcifications/haemorrhage/ enhancing components. Chest radiograph did not show an ymediastinal/ lunglesions. ELISA and PCR tests could not be done duetocostconstraints. Patient underwent laparotomy with excision and de-roofing of the cysts followed by peritoneal lavage. Post-operative period was uneventful. Gross specimen contained multiple cysts largest measuring 11x8x7cms. Granular serous fluid and laminated grey white membrane along with myxoid areas were seen within the cysts. Microscopic examination revealed typical outer laminated layer and inner germinal layer which was consistent with hydatid cysts. Patient was prescribed Albendazole 400 mg BD for three months and discharged. Patient has been advised follow up after 3 months.

DISCUSSION

Hydatid disease is a zoonotic disease caused by tape worm *Echinococcus granulosus* and rarely by *Echinococcus multilocularis*. It is a common parasitic infection of the liver in countries where animal husbandry is common. Dogs and other carnivores are definitive hosts, whereas sheep or other ruminants are intermediate hosts. Man becomes an accidental intermediate host by ingestion of eggs which develop into cysts¹. The most common symptom is abdominal pain followed by pressure effect and fever². Liver is the most commonly involved organ followed by lungs³. Peritoneal hydatidosis is usually secondary to traumatic, spontaneous and iatrogenic rupture of liver or splenic hydatid cysts⁴. Primary peritoneal hydatidosis is rare and accounts for 2% of all abdominal hydatidosis and no definite cause has been ascertained but presumed to be disseminated via lymphatics or systemic route^{5,6,7}. Diagnosis is by imaging and laboratory serological tests like

immunoelectrophoresis and ELISA. A polymerase chain reaction (PCR) using recombinant DNA antigen is used to identify the species of *Echinococcus*³. ELISA is the most commonly used test⁸. Surgery is the treatment of choice for abdominal hydatidosis with preoperative courses of Albendazole to sterilize the cyst, decrease the chance of anaphylaxis and to reduce the recurrence rate post-operatively. Also intraoperative peritoneal lavage with colicidal agents like hypertonic saline or povidone iodine reduces the anaphylaxis and recurrence⁹.

CONCLUSION

We report this case to impart the awareness to all the fellow medical colleagues that any cystic lesion with no clear features of malignancy in the abdomen should include a differential of hydatid cyst even in the absence of classical imaging features especially in the endemic regions.



Figure 1: Axial CECT – Multiple cysts (C) are seen in the peritoneum Uterus (U)

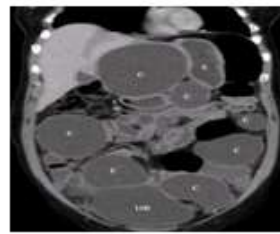


Figure 2: Coronal CECT – Multiple cysts (C) are seen in the peritoneum Urinary bladder (U), Stomach (S)



Figure 3: Axial CECT – One of the cyst (C) in the left lumbar region shows floating membranes within (arrows)



Figure 4: Axial CECT – Multiple cysts (C) are seen within the liver and the spleen. Stomach (S)

REFERENCES

1. Kushwaha JK et al. Primary disseminated extra hepatic abdominal hydatid cyst: a rare disease. *BMJ Case Reports* 2012;10.1136/bcr.02.2012.5808.
2. Karakaya K. Spontaneous rupture of hepatic hydatid cyst into the peritoneum causing only mild abdominal pain. *World J Gastroenterology* 2007; 13: 806-808.
3. Khuroo MS. Hydatid disease: Current status and recent advances. *Ann Saudi Med* 2002; 22:56-64.
4. Pedrosa I, Saiz A, Arrazola J, et al. Hydatid disease: radiologic and pathologic features and complication. *Radiographics* 2000; 20:795–817.
5. Singh RK. A case of disseminated abdominal hydatidosis. *J Assoc Physicians India* 2008; 56:55.
6. Iuliano L, Gurgu A, Poletini E, Gualdi G, De Marzio P: Musculoskeletal and adipose tissue hydatidosis based on the iatrogenic spreading of cystic fluid during surgery: Report of a case. *Surg Today* 2000; 30:947-9.
7. Astarcioglu H, Kocdor MA, Topalak O et al. Isolated mesosigmoidal hydatid cyst as an unusual cause of colonic obstruction: report of a case. *Surg Today*. 2001; (31):920-2.
8. Shailaja Shukla et al. Multiple disseminated abdominal hydatidosis presenting with gross hydatiduria: A rare case report. *Indian J Pathol Microbiol*. 2009; (52):213-4.
9. Necdet Ozalp et al. Peritoneal hydatidosis with ileus. *Bratisl Lek Listy*. 2009; 110(3):197-199.

Source of Support: None Declared
Conflict of Interest: None Declared