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Original Research Paper

General Surgery

A CASE REPORT OF DISSEMINATED INTRAPERITONEAL HYDATIDOSIS WITH RUPTURE OF INTRAPERITONEAL PELVIC HYDATID CYST

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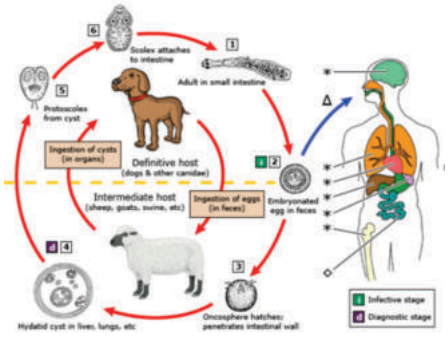
ABSTRACT A rare case report of disseminated intraperitoneal hydatidosis with rupture of intraperitoneal pelvic hydatid cyst has been described with brief review of literature .A 40 yr old male came with complaints of abdominal pain and vomiting for 3 days. On examination abdomen found to be distended with tenderness and guarding present in lower abdomen. Ct scan showed multiple intra peritoneal calcified cyst with cyst in the liver and rupture of pelvic cyst with moderate free fluid, possibility of ruptured hydatid cyst. Hence proceeded with emergency laparotomy . intra operative findings was ruptured hydatid cyst in pelvis with intact endocyst wall. Primary or secondary peritoneal hydatid cyst , represents an uncommon but significant manifestation of the disease. Prevention is the primary choice to reduce the incidence of the disease, but surgical removal of the cyst is the treatment of choice for this kind of disease to reduce morbidity and mortality.

KEYWORDS : hydatid disease, intraperitoneal hydatidosis, eccinococcosis, ruptured hydatid cyst

INTRODUCTION

Hydatid diseases are endemic in Mediterranean countries, Incidence ranges 0.4/1,00,000 population in Switzerland. 196/ 1,00,000 population in turkana regions Caused by parasite eccinococcus granulosus and eccinococcus multilocularis Humans are intermediate host. Dogs are the definitive host. Hydatid disease may be located in any organ of the body. The most frequently involved organ is liver(50-70%), lungs(20-30%). Kidney(3%), bone(1%), brain (1%) primary peritoneal eccinococcosis (2%), secondary peritoneal ecinococcosis (13%) Systemic anaphylaxis reaction have been reported in 1-12% cases. Secondary eccinococosis is a difficult problem to manage. Surgical management reduces the morbidity and mortality. A rare case of ruptured secondary hydatid cyst presented with peritonitis without anaphylaxis discussed here

Life Cycle of Eccinococcus Parasite



Case Study

Case Report

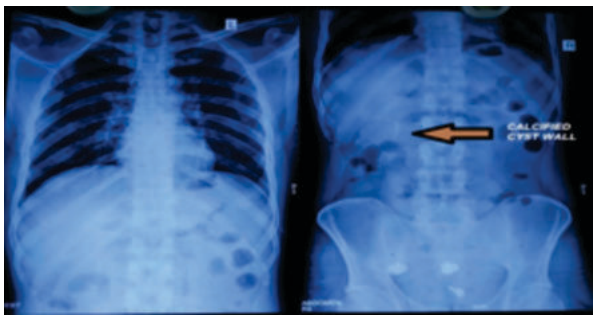
40 year old male without any co- morbidities came with complaints of abdominal pain and vomiting for 3 days, h/o loose stools for 3 days, No h/o similar complaints in the past, No previous surgeries in the past.

On examination

Patient GC- fair , Tachycardia +Abdomen distended, diffuse tenderness +, guarding + over hypogastrium and umbilical region, BS+

INVESTIGATIONS

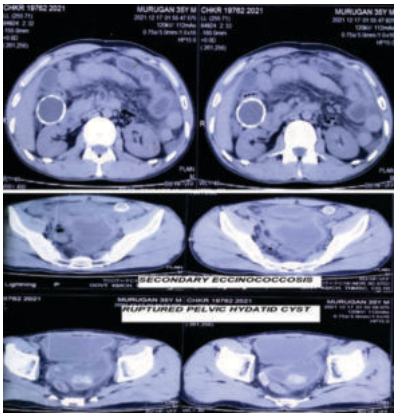
XRAY abdomen erect Calcification in right hypochondrium



CECT ABOMEN AND PELVIS

Hypo dense lesion with peripheral calcification of size 3.7 * 3.4 cm in right subhepatic region
Another similar lesions
1.7 *1.6 cm in left iliac fossa
2.4* 2.8 cm adjacent to rectum
2.7 *2.2 cm in segment 5 of liver
Moderate free fluid +
Hypodence collection measuring
6.3 * 5.9* 9.1 cm noted in pelvis ,
posterior to the bladder in recto vesicle space, with internal areas of calcifications

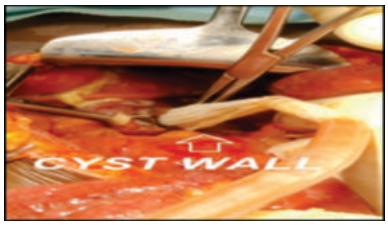
Possibility of ruptured hydatid cyst.

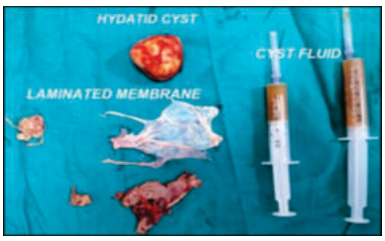


Hence proceeded with emergency laparotomy

Intra Operative Findings

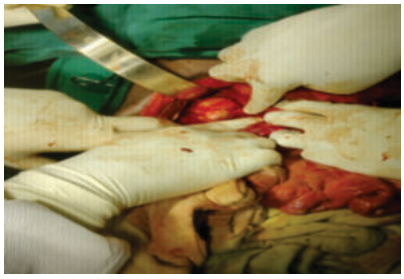
- Toxic fluid with flakes of around 300ml drained from peritoneal cavity
- Ruptured hydatid cyst in pelvis with intact endocyst wall
- Pericyst adherent to rectum and bladder
- Cystectomy done leaving pericyst
- Wash given using hypertonic saline and povidone iodine solution
- Calcified cyst in inferior aspect of liver of size 3*3 cm adherent to transverse colon
- Pericystectomy done
- Another liver bed cyst – content aspirated and wash given



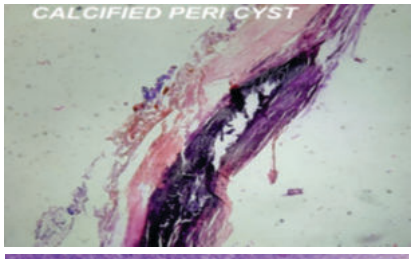


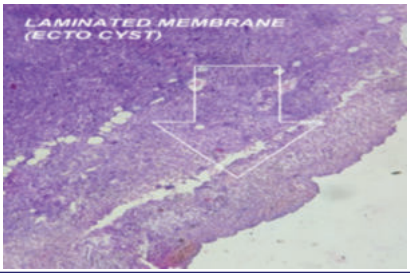
Ig G for eccinococcus – positive
Fluid cytology- 1000 cells/ cumm
90% - neutrophils
10%- lymphocytes

Microscopic examination-
scolex and hooklets resembling echinococcus were not seen
Fluid c/s- no growth



HPE of specimen
Irregularly thickened cyst wall with focal calcification with adjacent laminated membrane of hydatid cyst wall with areas of necrosis, dense sheets of neutrophils and lymphocytes





Classification

TABLE 74.2 World Health Organization Classifications of Hydatid Cysts

Cyst Type	Status	Ultrasound Features
CL	Active	Signs not pathognomonic, unilocular, no cyst wall
CE1	Active	Cyst wall, hydatid sand
CE2	Active	Multivesicular, cyst wall, rosette-like
CE3	Transitional	Detached laminated membrane, water-lily sign, less round, decreased intracystic pressure
CE4	Inactive	Heterogeneous hypoechogenic or hyperechogenic degenerative contents; no daughter cysts
CE5	Inactive	Thick, calcified wall, calcification partial to complete; not pathognomonic, but highly suggestive of diagnosis

TABLE 74.3 Hydatic Liver Cysts: Indications for Surgery, PAIR, and Medical Treatment

	Surgery	PAIR	Medical (BMZ)
Indications	Large CE2-CE3b cysts with multiple daughter vesicles Single superficially liver cysts Complicated cysts	CE1 > 5 cm CE3a > 5 cm Inoperable patients Refuse surgery Relapse after surgery Failure to respond to BMZ alone.	CE1 < 5 cm CE3a < 5 cm Inoperable patients Refuse surgery Multiple cysts in >2 organs Peritoneal cysts Prevent recurrence following surgery or PAIR
Contraindications	General contraindications for surgery Uncomplicated CE4 and CE5 Very small cysts	Biliary fistulae CE2 CE3b CE4 CE5	Pregnancy Uncomplicated CE4 and CE5 Alone if cyst > 10 cm Cysts at risk of rupture Chronic hepatic disease Bone marrow depression

CONCLUSION

Primary or secondary peritoneal hydatid cyst , represents an uncommon but significant manifestation of the disease. Prevention is the primary choice to reduce the incidence of the disease, but surgical removal of the cyst is the treatment of choice for this kind of disease to reduce morbidity and mortality.

REFERENCES:

1) APA. Townsend, J. C. M., Beauchamp, R. D., Evers, B. M., & Mattox, K. L. (2016). Sabiston textbook of surgery (21th ed.). ...
2) Blumgart's surgery of the liver, biliary tract, and pancreas Authors:William R. Jarnagin, J. Belghiti, L. H. Blumgart **Elsevier Saunders, Philadelphia, ©2012**
3) Yilmaz M, Akbulut S, Kahraman A, Yilmaz S. Liver hydatid cyst rupture into the peritoneal cavity after abdominal trauma: case report and literature review. *Int Surg*. 2012;97:239–244. doi: 10.9738/CC116.1.
4) Unalp HR, Yilmaz Y, Durak E, Kamer E, Tarcan E. Rupture of liver hydatid cysts into the peritoneal cavity. A challenge in endemic regions. *Saudi Med J*. 2010;31:37–42. doi: 10.1016/j.revmed.2009.02.027
5) Erel S., Kilicoglu B., Kismet K., Gollu A., Akkus M. A. Peritoneal hydatid cyst perforation: a rare cause of emergency abdominal surgeries. *Adv Ther*. 2008;25(9):943–950.
6) Mouaqit O, Hibatallah A, Oussaden A, Maazaz K, Taleb KA. Acute intraperitoneal rupture of hydatid cysts: a surgical experience with 14 cases. *World J Emerg Surg*. 2013;8:28. doi: 10.1186/1749-7922-8-28.