

**A rare cause of acute
abdomen: A case report of
spontaneous intraabdominal
hydatid cyst rupture and its
imaging results**

Learning objectives

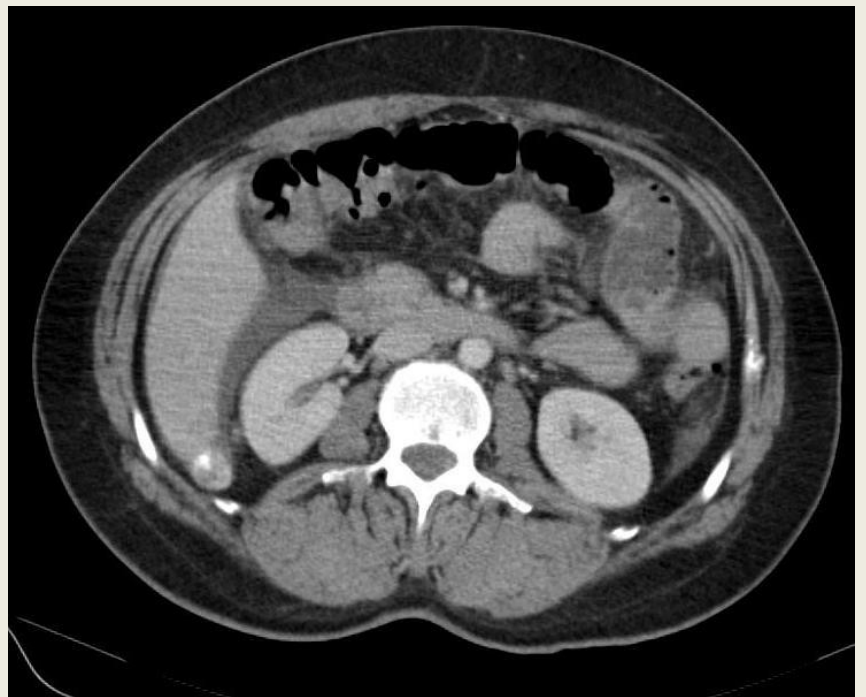
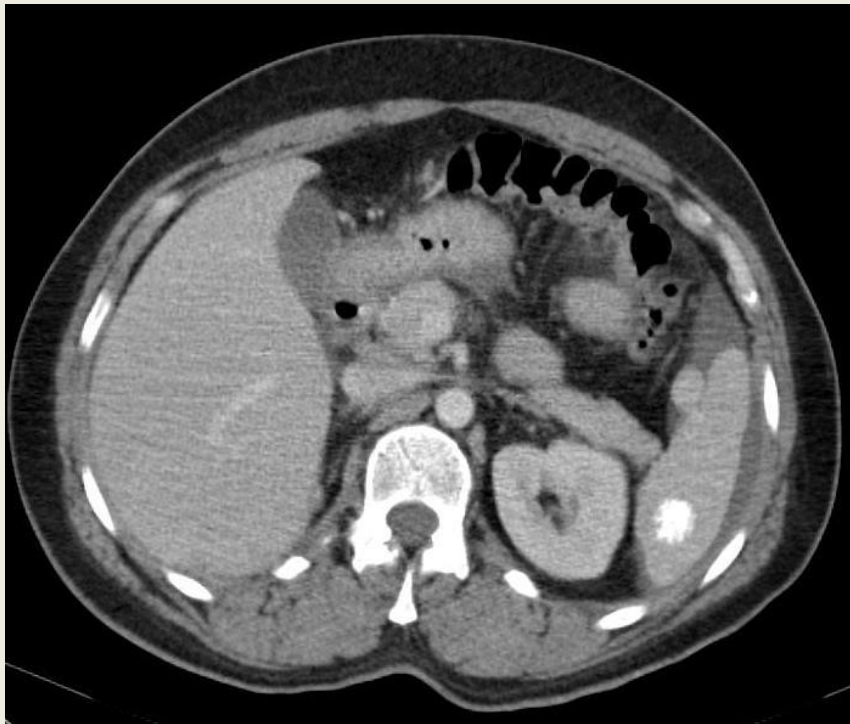
- Hydatid disease is generally due to *Echinococcus granulosus* and also rarely due to *Echinococcus Multilocularis*; and it may be endemic especially in Mediterranean including Turkey.
- It has been still an important public health problem. Rupture to the biliary system is its most common complication and it causes biliary dilatation and irregularity on the cyst wall.
- In addition, it generally has high morbidity and mortality rates. Preferred treatment according to clinical and radiological findings of the disease is surgical intervention, percutaneous aspiration/injection have been used as an alternative whereas albendazole has been used in medical treatment.

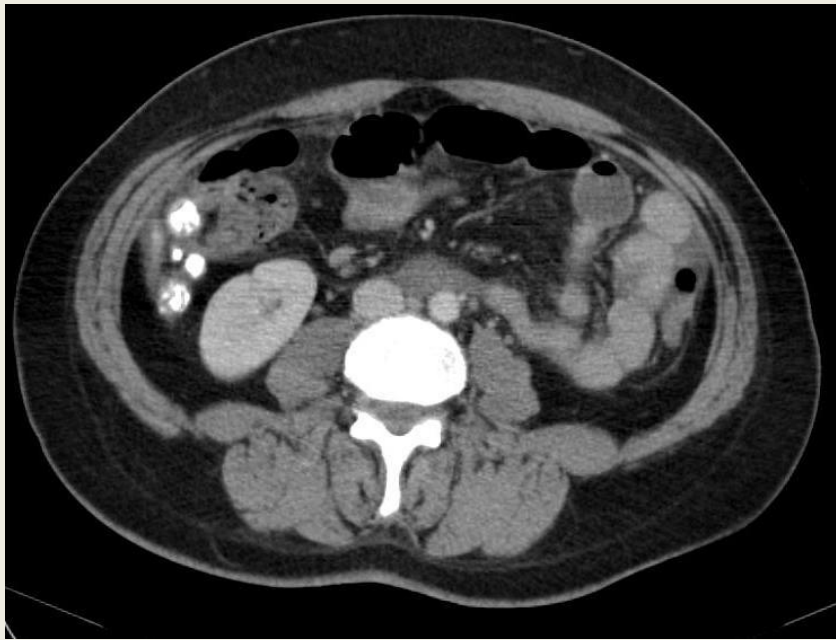
Background

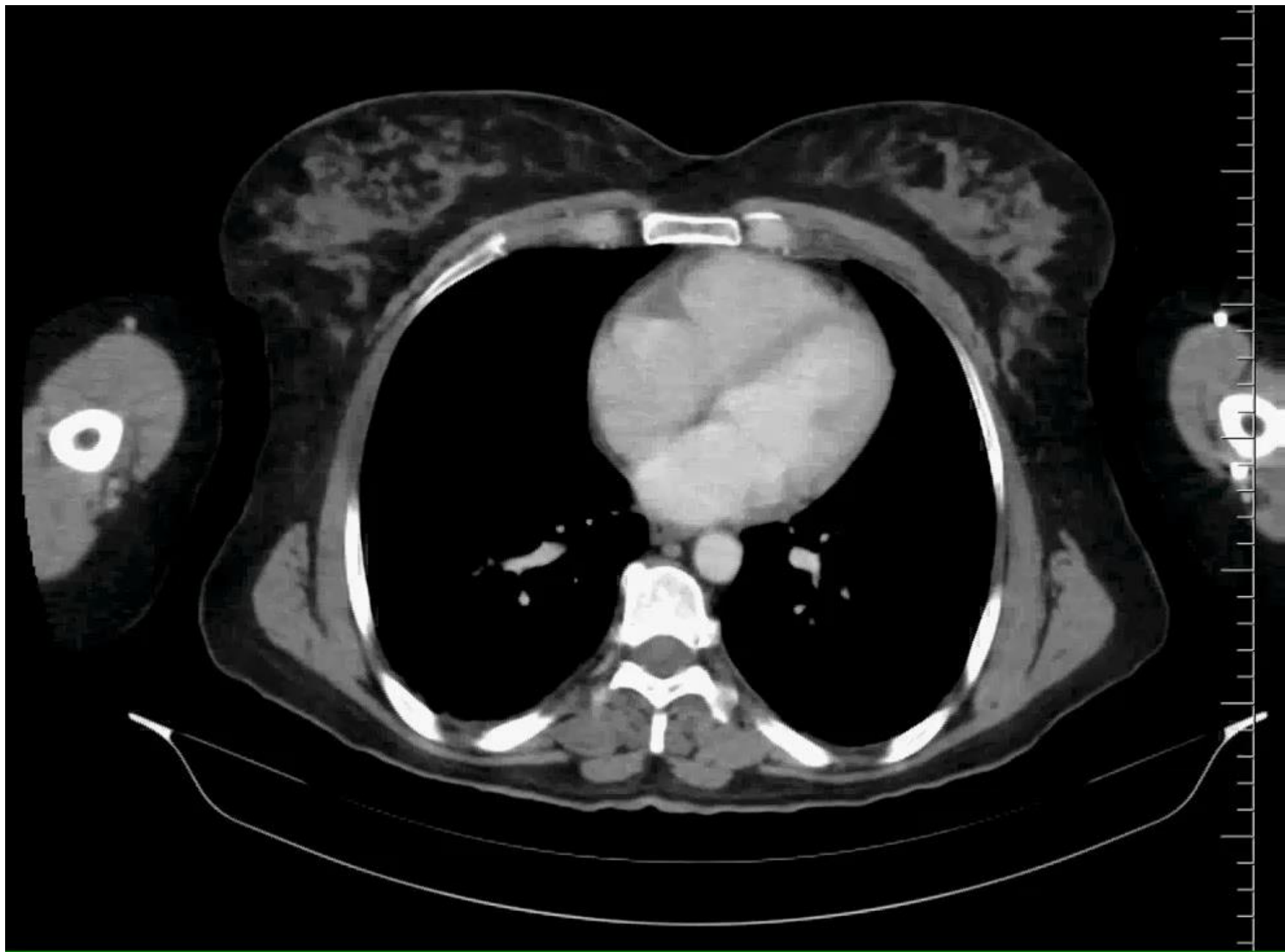
- In our case report, a 45-year old female patient admitted to emergency service with diffuse abdominal pain and nausea for last 2 days.
- Patient was conscious and cooperated; and it was found in her anamnesis that she had no systemic disease whereas she had undergone a laparoscopic gynecological operation due to hydatid cyst 10 years ago.
- Systemic examinations were normal; however there was diffuse rigidity and hypoactive bowel sounds in abdominal examination. Serum white cell count was $22000/\text{mm}^3$ and C-reactive protein was 8 mg/L in laboratory results.

Imaging findings or prosedure details

- Ruptured hydatid cyst, diffuse free fluid, calcified mass lesions at liver segment VI and VII, perihepatic and perisplenic free fluid were identified in IV contrast-enhanced abdominal CT examination.
- There were a cystic mass with partial mural calcification sized 5 x 7 cm between liver and stomach.
- In addition; there were multiple calcified masses sized 3,5 cm at maximum in abdominal cavity.

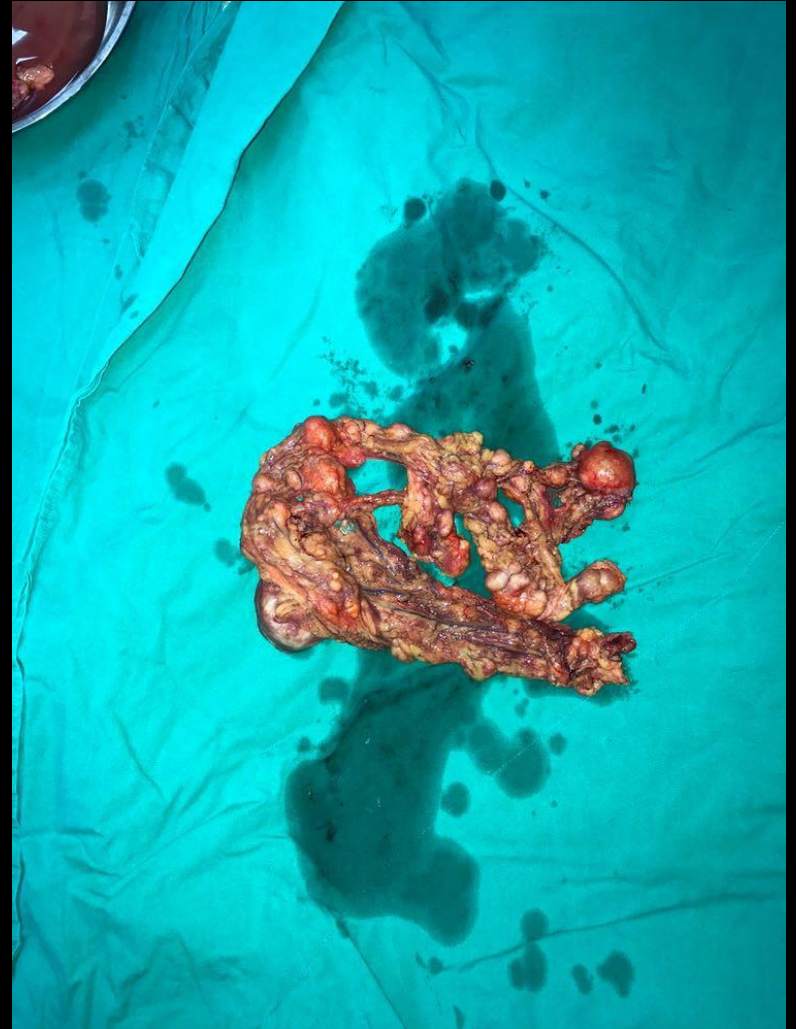
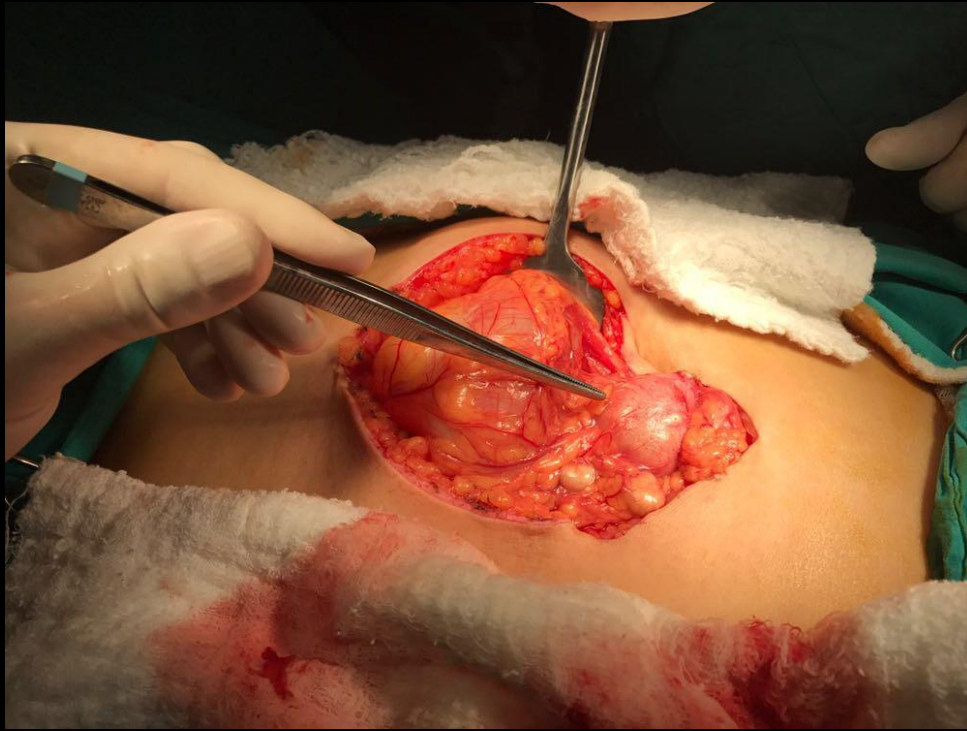






Conclusion

- Patient underwent surgery under general anesthesia with pre-diagnosis of acute abdomen due to hydatid cyst.
- 1500 cc of reactional blurred fluid was identified during laparotomy performed after prophylaxis with 1 gr of IV cefazolin sodium.
- During exploration, sphere-shaped hydatid cyst foci sized between 0.5-5 cm which covered whole omentum were observed.
- One of them which was 5 cm in diameter was perforated whereas others were mostly calcified.



Conclusion

- Omentectomy was performed. Hydatid cyst foci were seen in Douglas's pouch above both ovaries when exploration was proceeded.
- Excision was performed on these foci when possible. A degenerated cyst focus sized approximately 8 cm in segment II of left lobe of liver was identified.

Conclusion

- Partial cystectomy drainage was performed. It was identified that cyst content was opaque. Whole abdomen and cyst contents were irrigated with 3% hypertonic solution.
- Then, abdomen was closed by placing drains in both cyst content and Douglas pouch. Patient was discharged with full recovery and a prescription of PO albendazole (2x400 mg/day) after 1 week of postoperative hospitalization period without any clinical problem.

References

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