

## Introduction

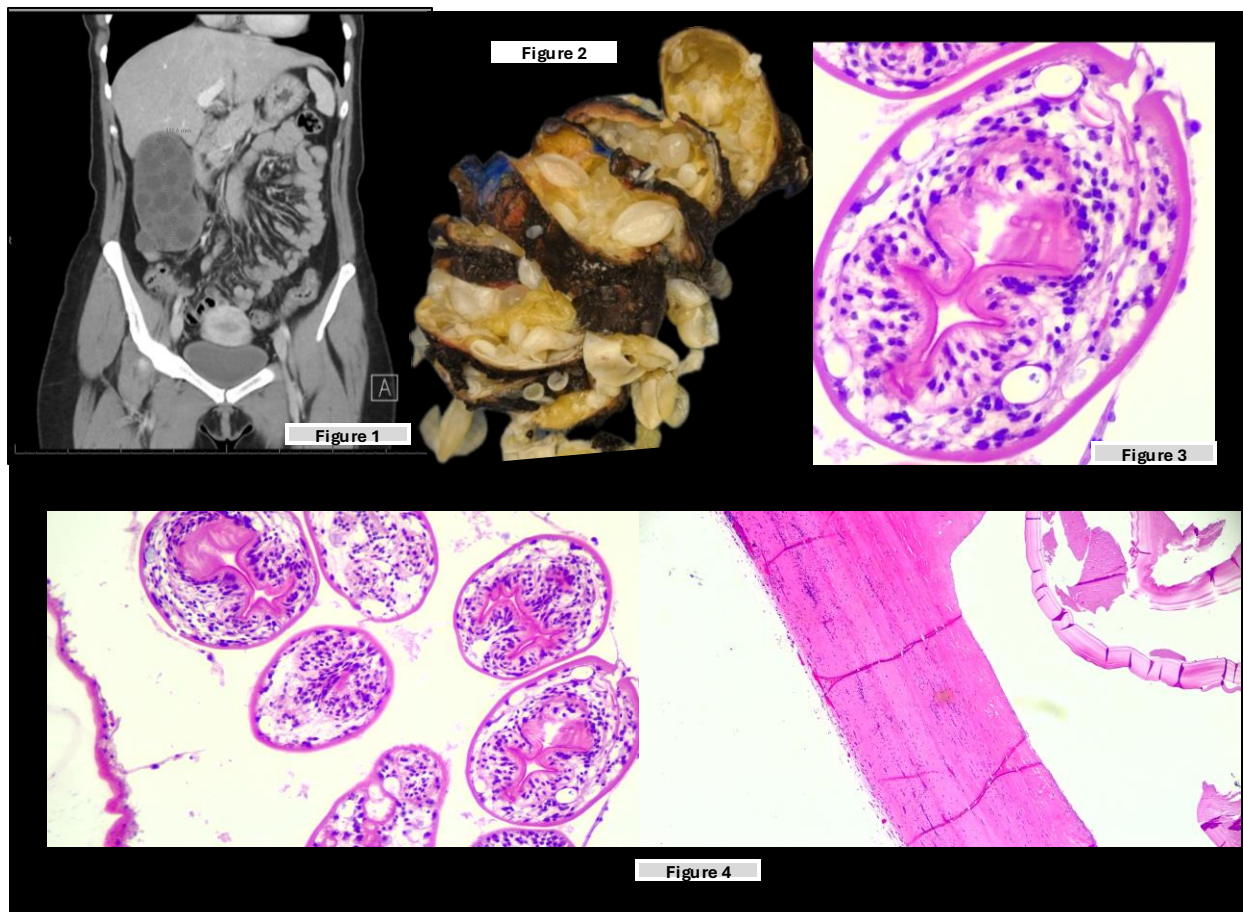
Hydatid cyst is a global zoonotic disease due to *Echinococcus granulosus* infection. The most common site of hydatid cysts in humans are the liver and lungs (95%). Even in endemic locations primary retroperitoneal hydatid cysts are rare. We report a 28-year-old patient with previous residence in Morocco with a primary retroperitoneal hydatid cyst which was clinically and radiologically suspicious for malignancy.

## Case

A 28-year-old female with a history of gastroesophageal reflux disease presented with abdominal pain and weight loss:

- CT Abdomen and Pelvis is significant for a large solid, multicystic mass centered within the right psoas muscle within the right retroperitoneum.
- The etiology of the mass was unclear; however, it was determined to be radiographically suspicious for malignancy.
- Given the nonspecific appearance of the mass, an ultrasound-guided percutaneous needle biopsy was performed and yielded nondiagnostic results with only extracellular amorphous debris present.
- Due to the patient's worsening symptoms, laparotomy was performed and the mass was resected with grossly negative margins
- Permanent pathology was significant for a hydatid cyst.

## Images



Figures: (1) Coronal section of the CT abdomen and pelvis is significant for a 11 x 10 x 6 cm multicystic mass within the right psoas muscle. (2) Gross photograph of the cystic mass upon serial sectioning (3- 4) H&E-stained sections of the degenerating cyst, showing hydatid cyst wall with protoscolices

## Discussion

- Humans become infected by consuming parasite eggs present in contaminated food, water, or soil as well as direct contact with infected animal hosts.
- High index of suspicion is crucial, especially in patients from an endemic region.
- Diagnosis may be aided by imaging and serologic testing for Echinococcus IgG.
- Surgical exploration in undiagnosed cases may lead to adverse complications.
- Gold standard treatment for hydatid cysts is total cystectomy without contamination. Care should be taken to avoid spillage and puncture.

## References

Goel N. (2021). Primary retroperitoneal hydatid cyst masquerading as malignancy. *Saudi journal of kidney diseases and transplantation : an official publication of the Saudi Center for Organ Transplantation, Saudi Arabia*, 32(5), 1482-1484. <https://doi.org/10.4103/1319-2442.344773>

Maryam Ghandhari, Amirhossein Mehri, Armin Dooostparast, Masoumeh Gharib, Reza Rezaei, Primary extraperitoneal hydatid cyst, a rare differential diagnosis of subdiaphragmatic mass: A case report, *Clinical Case Reports*, 10.1002/ccr3.8975, 12, 6, (2024).

World Health Organization. (n.d.). *Echinococcosis*.