

Case	(492) Perforated gallblader
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CASE PRESENTATION

A 90-year-old woman came to the emergency department due to severe cognitive impairment and low level of consciousness. In the past two weeks she has been presenting malaise and diffuse abdominal pain in hypogastrium.

On physical examination the woman looked sweaty and pallor, and her abdomen was painful and tender on right hypochondrium. Complete blood count revealed leucocytosis, mainly polymorphs.

Emergency ultrasonography of the abdomen revealed partially collapsed gallbladder with echogenic content (mud /lithiasis /detritus / pus). It also showed, adjacent to the gallbladder, a heterogeneous, well-defined, collection of 8 x 4.5 cm with internal echos (Figure 1).

It also presented free abdominal fluid in the peritoneal space (Figure 2). These findings were compatible with acute cholecystitis, perforated gallbladder and perivesicular collection.

DISCUSSION

Ultrasound is the technique of choice in the emergency room for the assessment of the gallbladder. It allows identifying lithiasis and signs of acute vesicular inflammation.

Among the ultrasound findings of acute cholecystitis are:

- Presence of lithiasis.
- Parietal thickening > 3mm.
- Vesicular distention > 10 x 4 cm (L x T).
- Perivesicular fluid or collections.
- Positive ultrasound Murphy sign.

The signs of advanced acute cholecystitis are:

- pericholecystic liquid.
- Floating mucous membranes. - Irregular and striated intramural echogenic images. - Interruption and / or ulceration of the wall.
- Focal bulge of the wall.

Vesicular perforation is a complication that occurs in 5-10% of cases of acute cholecystitis. The most frequent location is the vesicular fundus, because it receives less blood supply. The perforations are classified as acute, subacute (the most frequent) or chronic.

- Acute: generalized peritonitis. Free peritoneal fluid with hyperechoic echos. - Subacute: Perivesicular abscess. In ultrasound it appears as a complex collection of heterogeneous echogenicity, with septa, which can completely surround the gallbladder and collapse it.
- Chronic: internal biliary fistulas.

CONCLUSION

Vesicular perforation is a complication that occurs in 5-10% of cases of acute cholecystitis. The most frequent location is the vesicular fundus. Ultrasound is the technique of choice for the assessment of the gallbladder. It allows identifying lithiasis, signs of acute vesicular inflammation and complications.

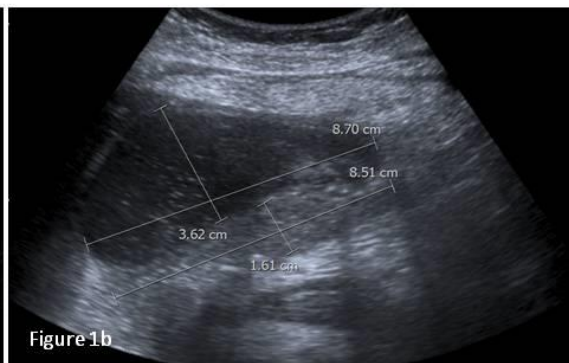


Figure 1a. US revealed partially collapsed gallbladder with echogenic content and a heterogeneous, well-defined, collection adjacent to the gallbladder.

Figure 1b. Measurements of the gallbladder and the collection adjacent.

Figure 2. Free peritoneal fluid in right lower quadrant.



BIBLIOGRAPHY

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