Case	(229) Epigastric pain, an unexpected finding
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CASE PRESENTATION

A 35-year-old woman is referred for the third time by her primary care physician to Emergency Departament for an intense epigastric pain irradiated to the back, without fever, changes in the intestinal habit or melena.

Physical examination showed a soft and depressible abdomen, pain on palpation in the epigastrium and right hypochondrium with defense. A suspicion of cholecystitis was established, and a US was required.

FINDINGS:

Duodenal wall thickening with small amount of periduodenal and perivesicular fluid. An air bubble is identified in the duodenal wall without being able to rule out extraluminal location. CT is performed to discard perforation, without observing pneumoperitoneum. Normal gallbladder.

DISCUSSION

Diagnosis: duodenal ulcer. The duodenal ulcer is the most frequent inflammatory pathology of the duodenum. It is a defect of the epithelium up to the depth of the submucosa that is observed in the gastric and duodenal localizations. Endoscopy is the technique of choice for ulcer diagnosis. It is rarely observed with ultrasound, but it has a very characteristic appearance: -Focal thickening of the duodenal wall with intramural linear echogenic image corresponding to the ulcer.

The ulcer filled with gas looks bright, echogenic with a fallen ring artifact, either in a focal area of thickening of the wall or beyond the wall, depending on the depth of penetration.

-The existence of perforation is suspected in the presence of thickening of the wall with periduodenal fluid and intra- or retroperitoneal open air, the latter finding being easier to identify with CT. -Edema in the acute phase and fibrosis in the chronic phase can present with thickening and deformity of the wall.

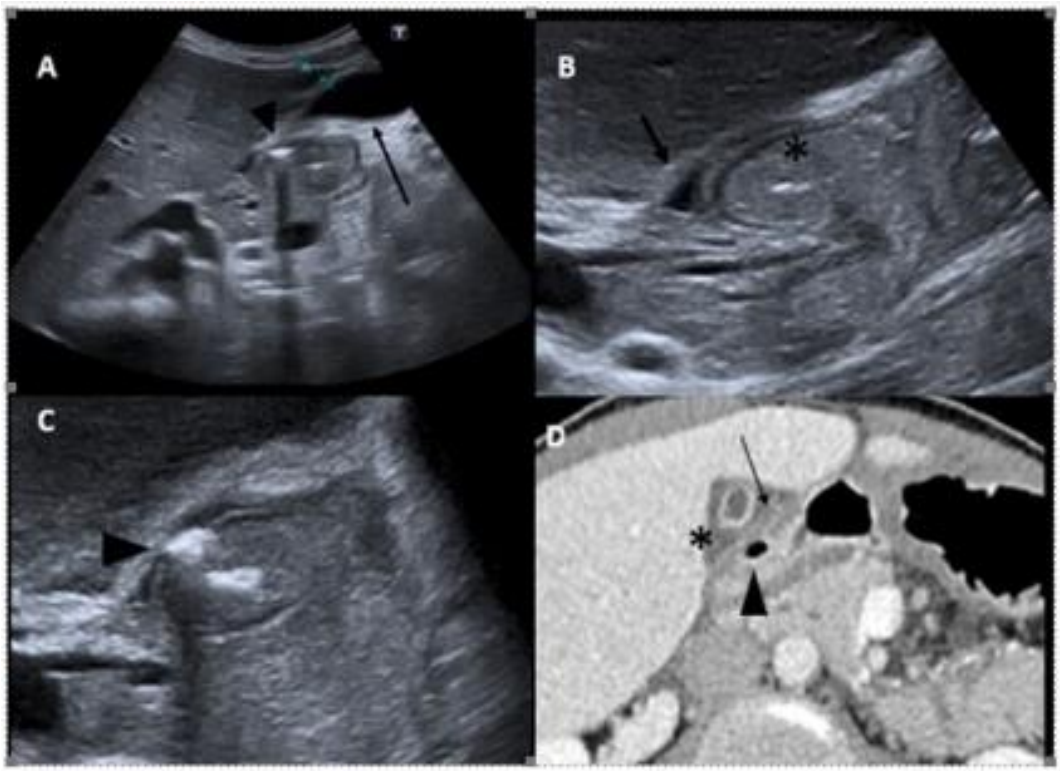
In our case, the ulcer was confirm with endoscopy.

CONCLUSION

- Duodenal ulcer is the most frequent inflammatory pathology of the duodenum

- Endoscopy is the technique of choice for ulcus diagnosis.

- In US, the ulcer filled with gas looks bright and echogenic with a fallen ring artifact. - Complications like perforation should be evaluated with CT.



A. US transverse plane. Non-distended vesicle, without stones and with thin wall (arrow). The diagnosis of cholecystitis is discarded. Notice the atypical gas in the wall of duodenum (arrowhead).
B. Us transverse plane in epigastrium. Thickening of the wall of the duodenum (*) with minimum amount of fluid adjacent (arrow).
C. US transverse plane. Accompanying the wall thickening a small amount of intramural gas is seen in de duodenum.
D. Enhanced abdominal CT. Transverse plane. Intramural gas (arrowhead), and edema of duodenum wall (arrow) and local fluid (*). Non evidence of pneumoperitoneum.

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