

Case	(335) A case of acute abdominal pain due to duodenal perforation.
Authors	D. Dulnik Bucka, S. Chen Xu, C. García-moncó Fernández, C. Machado Orihuela, A. Cebrián Rivera, A. López Ruiz.
Centre	Hospital Universitario Fundación De Alcorcón.

CASE PRESENTATION

A 48 year old woman presents to the emergency department complaining of severe and acute abdominal pain. She didn't refer any notable past medical history.

The patient didn't look well. She was afebrile. Cardiovascular and respiratory system examination were normal. Abdominal examination showed generalized rigidity, especially aching in the epigastrium. Laboratory markers manifested inflammatory response and excluded pancreatitis (normal amylase blood levels).

Abdominal CT scan was performed. Abdominal CT scan with contrast (portal venous phase) findings: The main findings were inflammatory changes surrounding the first portion of the duodenum and head of the pancreas and a large area of penetration into the anterior wall of the duodenum (Figs. A and C), indicating a perforated duodenal ulcer.

Very little amounts of extraluminal gas were present (Fig. A). There also was simple free fluid within the pelvis (Fig. C). The rest of the study was normal.

DISCUSSION

Gastroduodenal ulcers represent most common cause of GI tract perforation, representing a surgical emergency that still carries a risk of mortality.

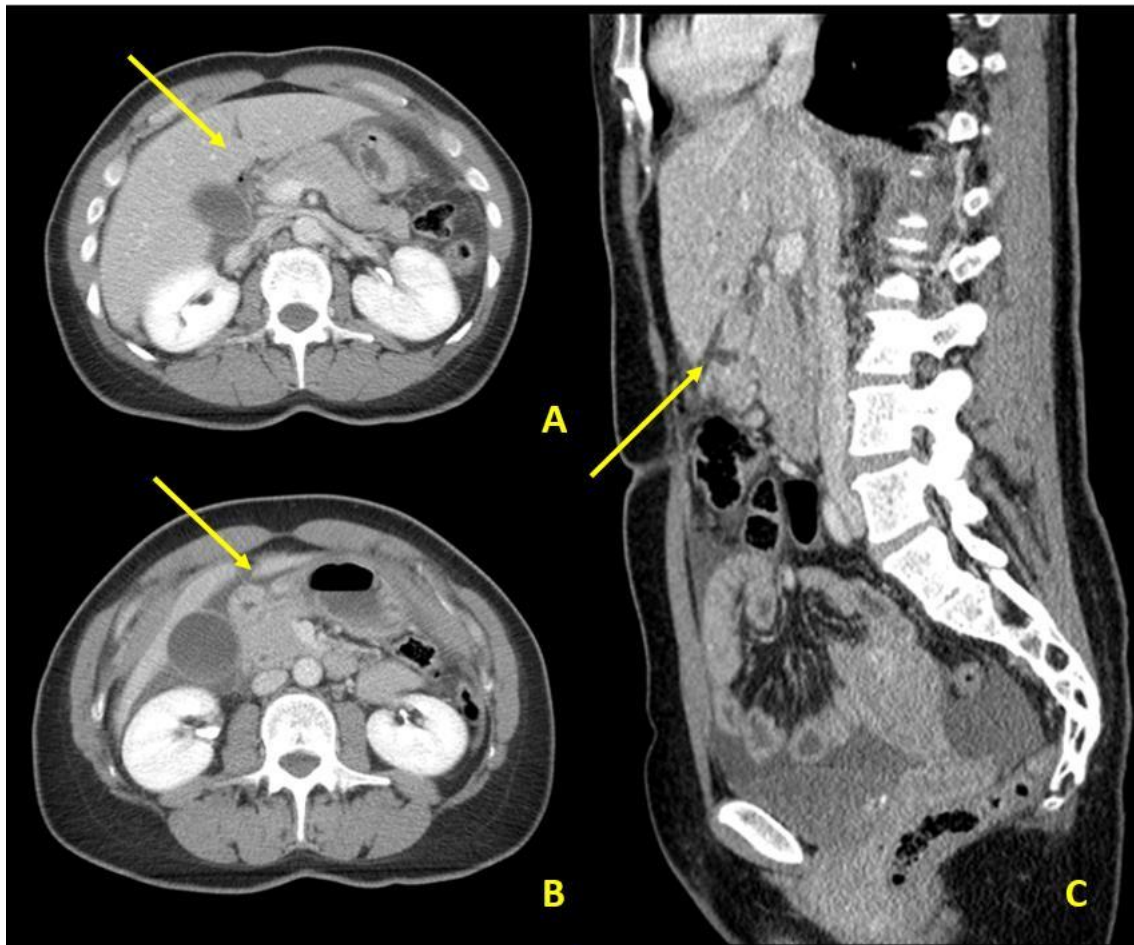
Patients may present with severe, sudden-onset epigastric pain, which can become generalised.

The peritonitis resulting from acid exposure may present as abdominal 'board-like rigidity'. Gastric and duodenal ulcers have equal risk of perforation, although duodenal ulcers are more common. Gas and fluid may be both intraperitoneal and extraperitoneal (anterior pararenal space). Duodenal ulcer perforation typically results in ectopic gas, fluid, and fat stranding immediately adjacent to duodenal wall.

Extraluminal gas can be intra- (first and second duodenal portion) or retroperitoneal (third duodenal portion). If enteric contrast medium is administered, it can extravasate. Existence of intra- and extra peritoneal gas in upper abdomen (above transverse mesocolon) is essentially diagnostic of perforated duodenum. Gas is often located in proximity to site of perforation.

CONCLUSION

Peptic ulcer perforation continues to be a major surgical problem. A high level of clinical suspicion is necessary, as a second perforative peptic lesion has an important risk of mortality, even if it has decreased modestly in the last decades.



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