Case	(463) Aorto duodenal fistula: what we should know?
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CASE PRESENTATION

A 90-year-old man was referred to the emergency department of our hospital with hematemesis and abdominal pain.

He was smoker with no medical history of interest. At physical examination he presented hypotension (blood pressure of 100/50 mmHg) and sweating.

The laboratory test showed anemia, leukocytosis and elevated inflammatory markers. A contrast-enhanced CT scan was required and some images are presented below.

The endoscopy was denied due to the thoracoabdominal disbalance and the abundant gastric bloody content. Finally, surgical treatment was rejected due to age and comorbidities of the patient, and he died one day after the diagnosis.

DISCUSSION

Aortoenteric fistulae (AEF) is defined as an abnormal connection between the aorta and the gastrointestinal tract (75% probability in duodenum), and represents an uncommon cause of catastrophic gastrointestinal hemorrhage.

Two types of AEFs are recognized. Primary aortoenteric fistulas (0,04-0,07%), associated in more than 50% with abdominal aortic aneurysm (AAA). Less common causes are peptic ulcer, foreign body,...And secondary aortoenteric fistulas (0,4-4%), as an infrequent complication of aortic surgery. The average time between the graft repair and clinical onset is about 5 years.

In our case we are facing a primary aortoenteric fistula (PAEF), because it arises de novo as the result of compression of an AAA. However, it is known that aortic inflammation/infection may have a role in their development.

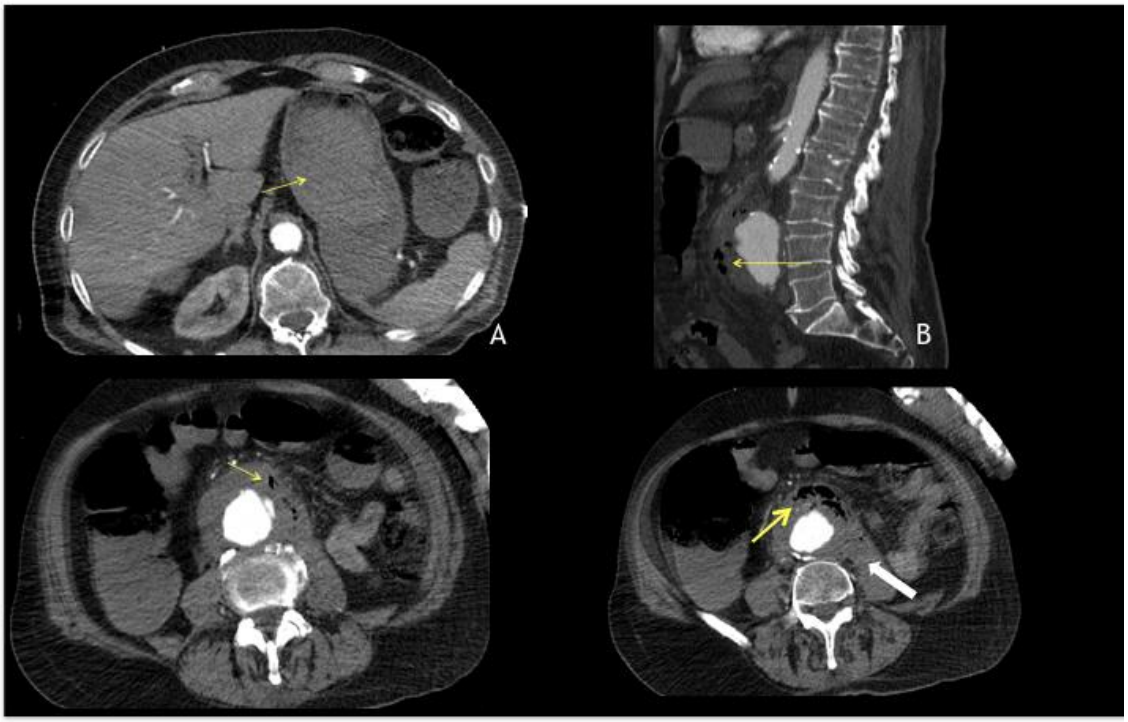
Gastrointestinal bleeding is the most common presentation. It can be a minor hemorrhage or a massive life-threatening bleeding. If patient is hemodynamically stable, the first-line study should be a CT angiography because endoscopy is useless in cases of great amount of blood or in distal fistulas to duodenum (3rd o 4th duodenal segment). In cases of inestability, patient should be taken directly to the operating room.

The only curative treatment is surgery. Without prompt surgical intervention, mortality approaches 100%. Operative mortality itself is as high as 50%.

CONCLUSION

- We must consider AEF in every patient with aortic pathology and gastrointestinal bleeding.

- Imaging techniques are fundamental to get an early diagnosis and surgical treatment, wich are fundamental in those cases.



(A) Axial contrast-enhanced CT image of upper abdomen shows a distended stomach with bloody dense content. **(C, D)** Inferiorly caudal axial images and **(B)** sagital reconstruction presents an infrarenal aortic aneurysm with gas in the mural thrombus, irregular wall, loss of the fat plane between the aneurism and the duodenum, and adyacent hematoma in left retroperitoneum (white arrow). These findings suggested aneurism rupture and duodenal fistula. [1]

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