



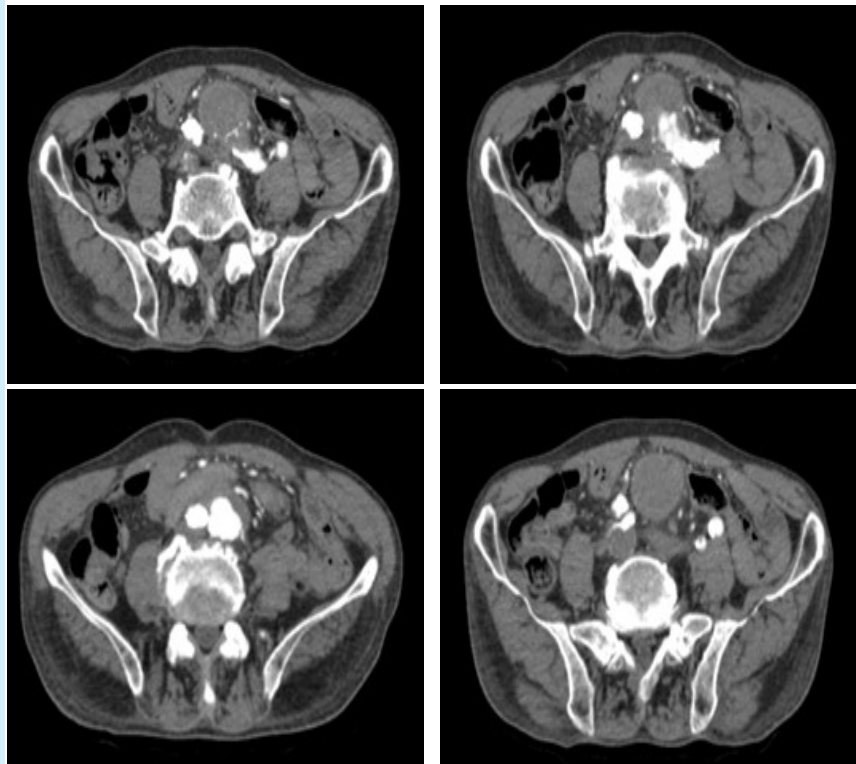
## Obscure Gastrointestinal Bleeding: A Diagnostic Dilemma?

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**Fig.1:** Abdominal and pelvic computed tomogram with and without contrast agent showed a 5-cm saccular aneurysmal mass around the bifurcation of the abdominal aorta that was associated with mural thrombosis and was extended to proximal common iliac artery. Surgical consultation was requested, and the surgeon transferred him to the operation room with an appropriate condition for surgery.

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We present a case of obscure gastrointestinal bleeding with the clinical presentation of hematemesis and melena. The patient was a 68-year-old man who complained of recurrent upper gastrointestinal bleeding and presented with hematemesis and melena. He provided no history of abdominal vascular reconstructive surgery, peptic ulcer disease, or any other diseases. On physical examination, the patient looked anemic with pale skin and was in an altered hemodynamic state. His vital signs were unstable. Heart and lungs examinations were normal. There was no scar on the abdomen. Epigastrium was tender on



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palpation without any organomegaly. He was admitted with the clinical presentation of upper gastrointestinal bleeding with hematemesis and melena. Laboratory evaluation, including blood tests, showed anemia. Emergency upper and lower endoscopy did not find a bleeding source. Total colonoscopy with terminal ileal intubation was negative. Abdominal and pelvic computed tomography (CT) with and without contrast showed a 5-cm saccular aneurysmal mass around the bifurcation of the abdominal aorta that was associated with mural thrombosis and was extended to proximal common iliac artery. The second part of the duodenum was attached to the upper border of aneurysmal mass with suspicious communication between the aorta and the small intestine.

### What is your diagnosis?

#### Answer:

#### Aorto-duodenal fistula

The aneurysmal mass was resected, and vascular graft reconstruction was done. There was a defect in the upper wall of the aortic aneurysm contiguous with the fourth part of the duodenum.<sup>1,2</sup> Abdominal and pelvic CT with and without contrast showed increased enhancement material in the fourth part of the duodenum. Air bubbles of gas in the aneurysmal sac and periaortic inflammatory tissue were not seen. An aorto-duodenal fistula was found between the aorta and the fourth part of the duodenum that was ligated.<sup>3</sup> And aneurysmal mass was resected with vascular graft re-construction.

This case illustrates the intensive care of life-threatening hemorrhage from an aorto-enteric fistula. This patient survived probably because of the rapid and correct diagnosis and also the team working between the gastroenterologist, the radiologist, and the surgeon.

### DISCUSSION

The diagnosis and treatment of aorto-enteric fistula are difficult. It is a big diagnostic problem for gastroenterologists and surgeons.<sup>1</sup> But in a patient with hematemesis and melena with aortic aneurysm when upper and lower endoscopy could not yield a bleeding source, a diagnosis of aorto-enteric fistula should be considered.<sup>2</sup> Diagnosis of aorto-enteric fistula requires the physician to be highly suspicious about the patient presenting with

signs and symptoms of gastrointestinal bleeding. In the management of acute gastrointestinal bleeding and aorto-duodenal fistula endoscopy plays a major role. In hemodynamically stable patient. Endoscopy should only be performed when with suspicion of aorto-enteric fistula. A normal endoscopy does not rule out diagnosis of aorto-enteric fistula, and really it is not sensitive in the diagnosis of aorto-enteric fistula. Diagnosis of aorto-enteric fistula results from a highly clinical suspicion. The role of endoscopy is to rule out other etiologies of acute upper gastrointestinal bleeding, like peptic ulcers, esophageal varices. Enteroscope may be useful, but it should be remembered that observation of a fistula in the distal portion of upper part of small intestine is extremely difficult because of anatomic limitations. Consideration of the "herald bleed" provide time for correct diagnosis and treatment. Diagnosis in early stages is essential for a promising prognosis because of the fatal nature of aorto-enteric fistula. Upper and lower endoscopy and spiral CT with dynamic angiography and with double contrast are the most useful methods to diagnose aorto-enteric fistula.<sup>3</sup> Treatment requires surgical resection of the aneurysm and anatomic and physiological reconstruction. In primary aorto-enteric fistula anatomic reconstruction with a Dacron and with repair of the adjacent area of small bowel with insertion of omentum between the intestinal and aortic fistula, is practical method. Recent trials with one stage reconstruction have shown that some materials could be useful for one-stage revascularization with better prognosis.<sup>4</sup> In our case, the available clinical, instrumental, and radiological supports made the hypothesis of such a diagnosis very probable. These findings, associated with gastroesophageal bleeding and the history of aortic aneurysm, led to the diagnosis of aorto-enteric fistula. The aim of this report was to emphasize the early diagnosis and management of all gastrointestinal bleedings in patients without a history of aortic aneurysm.<sup>5,6</sup>

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### ETHICAL APPROVAL

There is nothing to be declared.

**CONFLICT OF INTEREST**

The author declares no conflict of interest related to this work.

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