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PICTURES IN DIGESTIVE PATHOLOGY

Acute mesenteric ischemia

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CASE REPORT

A 76 year-old male with a mitral valve mechanical prosthesis under chronic warfarin therapy was admitted at our hospital with hematemesis and abdominal pain with onset five hours earlier.

The patient was anxious, his heart rate was 98 bpm (beats per minute) and blood pressure 90/40 mmHg. On auscultation a cardiac metallic sound was heard while pulmonary sounds were normal. The abdomen was mildly distended without rebound reaction and bowel sounds were present. Digital rectal examination did not show melena.

Blood analysis: hematocrit 39.4%, platelet count 144.0 x10^3/μL, Internacional normalized ratio 4.03, activated partial thromboplastin time 29.6 seconds, creatinine 2.1 mg/dL, blood urea nitrogen 42.8 mg/dL, serum albumin 19 g/L, AST 906 U/L, ALT 728 U/L, total bilirubin 3.2 mg/dL, conjugated bilirubin fraction 1.8 mg/dL, DHL 3787 U/L.

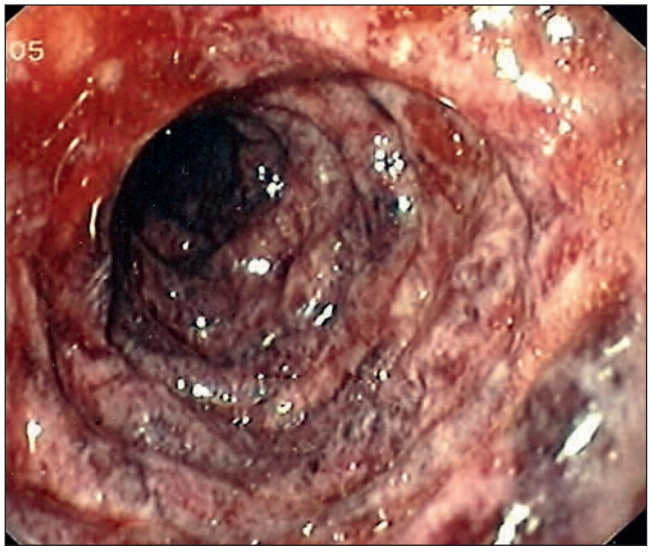
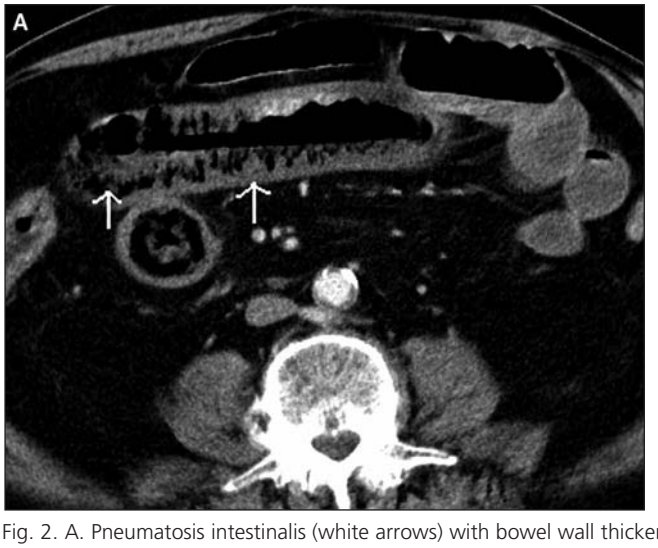


Fig. 1. Endoscopic view of duodenum (second portion).

Esophagogastroduodenoscopy visualized congestive, ulcerated and necrotic appearance of the mucosa of gastric fundus and body, second and third (Fig. 1) portions of the duodenum, with blood oozing from these sites suggesting major gastrointestinal ischemia. The gastric antrum and duodenal bulb were spared.



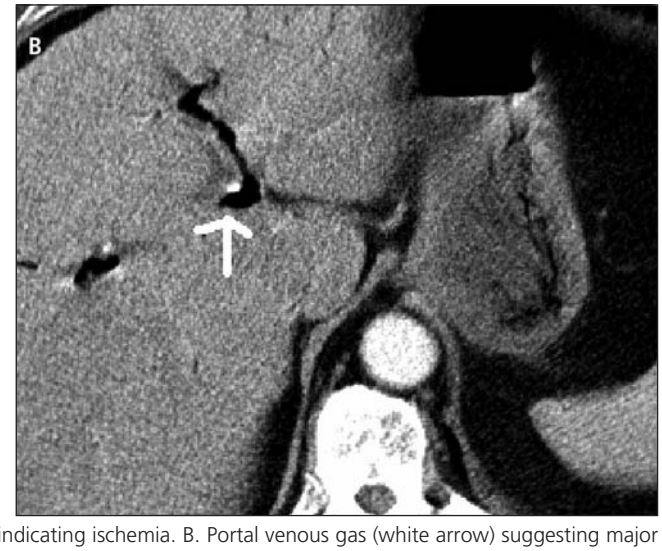


Fig. 2. A. Pneumatosis intestinalis (white arrows) with bowel wall thickening indicating ischemia. B. Portal venous gas (white arrow) suggesting major mesenteric ischemia.

Computed tomography scan confirmed acute mesenteric ischemia through indirect typical imaging findings (Fig. 2).

Enoxaparin 1 mg/kg subcutaneously every 12 hours was started and albeit significant clinical, radiological and endoscopic improvements were initially registered, the patient died one month after admission of nosocomial pneumonia.

DISCUSSION

The diagnosis of acute mesenteric ischemia is not always easy to accomplish and depends on an elevated index of suspicion (1). Abdominal pain and distension in an elderly patient with previous history of cardiovascular pathologic previous events is a common presentation (2). Gastrointestinal bleeding manifested with hematemesis is rare. Currently, imaging techniques have yielded important clarification of this serious condition. The combination of pneumatosis intestinalis and portomesenteric venous gas seen on computed tomography (CT) scan is highly suggestive of severe bowel ischemia (1,3). Endoscopic findings of bowel infarction may add important documentation to this condition (4).

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