Jejunal angiodysplasia: A rare case of gastrointestinal bleeding

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Section: Abdominal imaging
Area of Interest: Abdomen Gastrointestinal tract Small bowel
Imaging Technique: CT
Special Focus: Haemorrhage Case Type: Clinical Cases
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Patient: 83 years, male

Clinical History:

An 83-year-old man was presented to our emergency department with recurrent abdominal pain, weakness, and repeated melena for the past 3 weeks with no history of fever. Physical examination revealed no significant findings. At presentation, laboratory examination revealed marked anemia (hemoglobin was 6 g/dL; hematocrit 21.7%) with increased CRP (15.5 mg/L).

Imaging Findings:

He underwent an abdominal ultrasound, endoscopy, and colonoscopy that were normal.

A subsequent urgent computed tomography (CT) was then performed for further evaluation. Multiphase CT revealed a serpiginous vascular lesion in the jejunum in the portal-venous phase (figure 1 - arrowhead, figure 2 - arrowhead). There are also multiple distended loops associated with paralytic ileus.

Due to previous acute upper gastrointestinal bleeding and hemodynamic instability, the patient underwent surgical exploration. The involved segment was resected and end-to-end jejuno-jejunal anastomosis was carried out. The biopsy of segmental jejunal resection shows exuberant submucosa oedema with numerous thin-walled, tortuous and ectatic vessels that confirmed angiodysplasia of the small bowel (figure 3).

Discussion:

Also known as angioectasias or vascular ectasia, this condition consists of an abnormal, ectatic dilated, tortuous blood vessel that is found in the mucosa and the submucosa [1]. While colonic angiodysplasia is a recognized finding of the lower intestinal tract in the elderly, small intestinal angiodysplasia is rare. [2] The presence of angiodysplasia goes unnoticed until bleeding occurs. [3]

Approximately 5% of GI bleeding occurs from the small bowel. [3] Because of an inability to visualize the small bowel properly, patients with a small bowel GI bleed usually end up undergoing multiple diagnostic investigations, requiring multiple hospitalizations and transfusions; therefore, it is necessary to identify the cause and site of haemorrhage accurately, to institute appropriate, effective therapy. [1]
The clinical picture is variable, and the patient can be asymptomatic, having iron deficiency anaemia (due to frequent bleeding), or even can be presented by acute GI bleeding. [1]

Multidetector CT, conventional angiography, and capsule endoscopy are important modalities for the demonstration and diagnosis of this disease.

CT identifies the site of active bleeding as a focal area of hyperattenuating or contrast extravasation in the bowel lumen and has a higher sensitivity in detecting active GI bleeding than for obscure GI bleeding.[1] Enhancement of angioectasias is brighter during the enteric phase and fades during the delayed phase. These lesions seldom enhance during the arterial phase, which distinguishes them from arterial lesions. Likewise, an enlarged feeding artery or early draining vein is usually not seen. [4]

The treatment option for long-term control in angiodysplasias is medical therapy for the most part. Operative intervention has been indicated for refractory bleeding or lesions in sites not accessible to endoscopic interventions. [3,5]

In conclusion, angiodysplasias of small intestinal are a rare entity and should be considered in the differential diagnosis of gastrointestinal bleeding and chronic anaemia.

**Differential Diagnosis List:** Jejunal angiodysplasia, Inflammatory bowel disease, Tumors

**Final Diagnosis:** Jejunal angiodysplasia

**References:**


Figure 1

Description: Axial unenhanced phase

Origin: © Department of Radiology, Centro Hospitalar e Universitario de Coimbra EPE, CHUC, Coimbra, Portugal, 2021
Description: Coronal arterial phase shows a focal nodular area of enhancement in jejunum.

Origin: © Department of Radiology, Centro Hospitalar e Universitario de Coimbra EPE, CHUC, Coimbra, Portugal, 2021
Figure 3

Description: Coronal portal-venous phase shows progressive accumulation of contrast material in dependent portion of small bowel Origin: © Department of Radiology, Centro Hospitalar e Universitario de Coimbra EPE, CHUC, Coimbra, Portugal, 2021
Description: Axial contrast-enhanced image in portal-venous phase showing dilated serpiginous vascular channels in jejunum Origin: © Department of Radiology, Centro Hospitalar e Universitario de Coimbra EPE, CHUC, Coimbra, Portugal, 2021
Figure 5

Description: Histopathology revealed exuberant submucosa edema with numerous thin-walled, tortuous and ectatic vessels (H&E, 40x) Origin: © Department of Pathology, Centro Hospitalar e Universitario de Coimbra EPE, CHUC, Coimbra, Portugal, 2021