MDCT demonstration of jejunal angiodysplasia: an uncommon cause of lower gastrointestinal haemorrhage

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DESCRIPTION

A 20-year-old man presented with melena for the past 3 weeks. He had no history of fever, abdominal pain, altered bowel habits, non-steroidal anti-inflammatory drugs intake, petechiae or weight loss. Laboratory markers were unremarkable except for a low haemoglobin (5.2 g/dL) for which multiple blood transfusions were given. A contrast-enhanced CT (venous phase) revealed serpiginous vascular channels along the valvulae of the proximal jejunum, although there was no active contrast extravasation seen (figures 1 and 2). In addition, there was a suspicion of malrotation of the bowel, which was confirmed preoperatively. Postoperative histopathology following segmental jejunal resection confirmed angiodysplasia of the small bowel.

Small bowel haemorrhage accounts for only 4% of all cases of gastrointestinal (GI) bleeding and of the underlying causes; angiodysplasia is a highly

infrequent cause. Angiodysplasia, although the commonest vascular lesion of the GI tract involves small bowel in only 15% of cases, 77% cases involve the caecum or ascending colon.¹ Most of the patients are elderly and the lesions presumably are sequel of age-related degeneration of the mucosal and sub-mucosal blood vessels. In contrast, a congenital origin has also been implicated for lesions detected in young patients with no other attributable cause.² Diagnosis of angiodysplasia is often challenging, although multidetector CT (MDCT), conventional angiography and capsule endoscopy may aid in their diagnosis. MDCT for GI bleeding, the best protocol is imaging without oral contrast (just water) and the scan is best performed first in the arterial phase at 30 s. The optimal management depends on the severity of haemorrhage and ranges from conservative medical therapy to endoscopic ablation and/or surgical excision.^{1 2}

Figure 1 (A and B) Axial contrast-enhanced images in portal phase showing intramural and perienteric dilated serpiginous vascular channels in proximal jejunum (line arrow).

Figure 2 (A) Axial contrast-enhanced image showing dilated superior mesenteric vein (arrow head) anterior and left to superior mesenteric artery with jejunal loops occupying right lumbar region (bold arrow) indicating evidence of malrotation. (B) Coronal maximum intensity projection image showing a network of abnormal dilated venous channels (line arrow) in proximal jejunum draining into dilated superior mesenteric vein (arrow head).

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Learning points

- ▶ Angiodysplasia is the commonest vascular lesion of the gastrointestinal (GI) tract that usually present as GI haemorrhage.
- ▶ Caecum and ascending colon are commonest segments of bowel to be involved by this disease with occasional involvement of small bowel.
- ▶ Pathological causes attributed to angiodysplasia are congenital origin in young adults and age-related vascular degeneration in elders.
- ▶ Multidetector CT, conventional angiography and capsule endoscopy are important modalities for demonstration and diagnosis of this disease.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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