IMAGES OF THE ISSUE

A Rare Cause of Recurrent Iron-Deficiency Anemia: Cavernous Hemangioma of the Small Intestine

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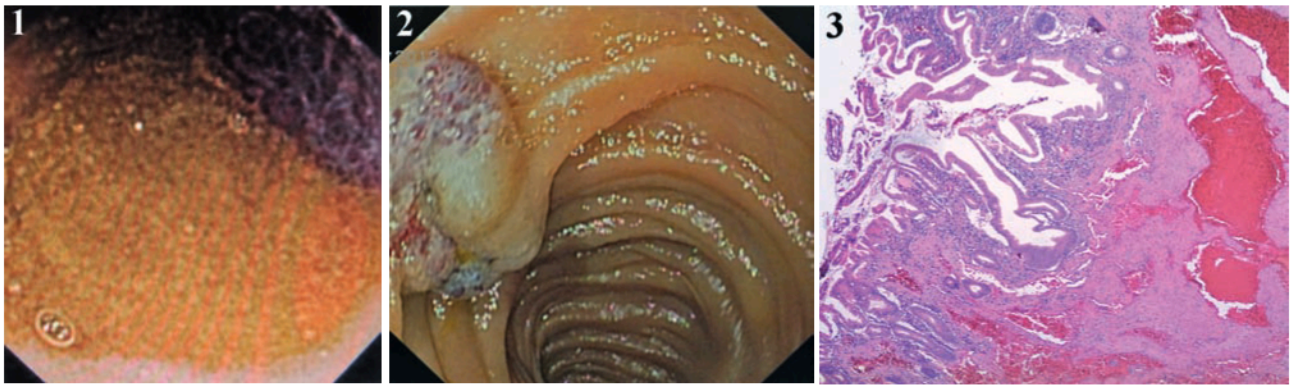

A 23-year-old Caucasian male presented with weakness and dizziness. Clinical examination showed pallor and mild tachycardia. Laboratory tests revealed microcytic, hypochromic anemia (hemoglobin 3.6 g/dl, MCV 61fl, MCH 16pg/ml, ferritin 1ng/ml, soluble transferrin receptor 23.1 mg/l, reticulocytes 1.9%). Because of anemia and melena, six months ago the patient had undergone gastroscopy, colonoscopy and MRI of the intestine. At that time, reflux esophagitis and Helicobacter pylori positive gastritis were diagnosed. No other cause for intestinal bleeding could be found. Hemoglobin remained stable, and he was discharged with eradication therapy for Helicobacter pylori infection.

At the present readmission, no gastrointestinal bleeding signs were present. Iron resorption test, gastroscopy and abdominal ultrasound were without pathological findings. Capsule endoscopy showed a dark-red lesion in the jejunum in only one short sequence (Fig. 1). Single-balloon enteroscopy was performed, in which the lesion presented as a bluefish-red, about 30mm size, exophytic tumour in the upper jejunum (Fig. 2). Prior to labeling the site with ink injection, biopsies of the lesion were taken and revealed only normal jejunal mucosa. CT visualized the lesion as a small intraluminal polyp without infiltration of the surrounding tissues. To obtain a definite diagnosis and because severe bleeding had occurred, the patient underwent laparoscopic segmental resection of the jejunum. Figure 3 shows on the surface and in deeper layers of the intestinal mucosa large vessels containing erythrocytes consistent with the diagnosis of cavernous hemangioma (H&E; 100x).

Hemangiomas are frequent benign hereditary vascular tumours, which are thought to be hamartomas and can principally involve all organs and systems, with skin, liver and spine being the most affected. Usually, they are already present at birth and after a period of growth in the first years of life, they show a strong tendency to develop [1]. In contrast to capillary hemangiomas, cavernous hemangiomas of the intestine are rare and can mainly be found in the upper and lower GI-tract but rarely in the small intestine. These tumours can cause severe bleeding, whereas capillary hemangiomas usually cause occult blood loss. Cavernous hemangioma of the small intestine can be diagnosed by contrast enhanced computed tomography or capsule endoscopy and balloon enteroscopy as shown in our patient [2]. Treatment of solitary lesions is usually surgical. In cases of multiple intestinal hemangiomas - such as in blue rubber-bleb naevus syndrome - endoscopic treatment by argon plasma coagulation is an option [3].

References

1. Haggstrom AN, Lammer EJ, Schneider RA, Marcucio R, Frieden IJ. Patterns of infantile hemangiomas: new clues to hemangioma pathogenesis and embryonic facial development. Pediatrics 2006; 117:698-703.
2. Quentin V, Lermite E, Lebigot J, Marinnes MZ, Arnaud JP, Boyer J. Small bowel cavernous hemangioma: wireless capsule endoscopy diagnosis of a surgical case. Gastrointest Endosc 2007; 65:550-552.
3. Anzinger M, Gospos J, Pitzl H, Koletzko S, Heldwein W, Schmitt W. Blue rubber-bleb nevus syndrome and therapeutic double balloon enteroscopy. Z Gastroenterol 2006; 44:1141-1144.

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