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LETTER TO THE EDITORS

BLEEDING ANGIODYSPLASIA OF THE MAJOR DUODENAL PAPILLA - HOW SHOULD IT BE HANDLED?

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Angiodysplasia is characterized by degenerative vascular dilation of the capillary net in the absence of dysplastic tissue. On endoscopy, flat or slightly elevated, reddish, roundish or starry lesions are observed, measuring normally between 2 and 10 mm. Angiodysplasia is a frequent cause of unexplained upper gastrointestinal bleeding with significant morbidity.[1] It often occurs in the gastric antrum but may also occur in the duodenum and rarely in the esophagus. In the small bowel, it is the cause of unclear gastrointestinal bleeding in 30% to 40 % of the cases.[1,2]

The incidence of this lesion increases with age. Diagnosis may be established by upper digestive endoscopy, scintigraphy with marked erythrocytes, selective angiography, and also by wireless endoscopy. We report a rare case of angiodysplasia of the major duodenal papilla in a patient with chronic iron deficiency anemia of unexplained etiology.

A 76-year-old woman, Caucasian, with a history of weakness, asthenia, and myalgia, was investigated for chronic iron deficiency anemia. On physical examination she presented discolored mucosae, without other abnormalities. On a previously performed colonoscopy and upper digestive endoscopy, no lesions that might have caused anemia were seen. Scintigraphy with labelled red blood cells and arteriography did not show a hemorrhagic source of bleeding. Capsule endoscopy was performed, but no abnormality was found. Laboratory test results were as follows: Hb, 8.2 g/dL; Ht, 27.8%; MCV, 75 fL; platelet count, 150,000; PT 100% with INR equal to 1. Another upper digestive endoscopy was performed and showed a lesion with blood seepage in the second portion of the duodenum. Using a duodenoscope with lateral vision, a flat, roundish, reddish lesion of approximately 10 mm was observed on the major duodenal papilla, showing active oozing of blood, suggestive of a vascular lesion (Figure 1). Because the lesion occupied the apical third of the major duodenal papilla, endoscopic resection was elected (Figure 1).

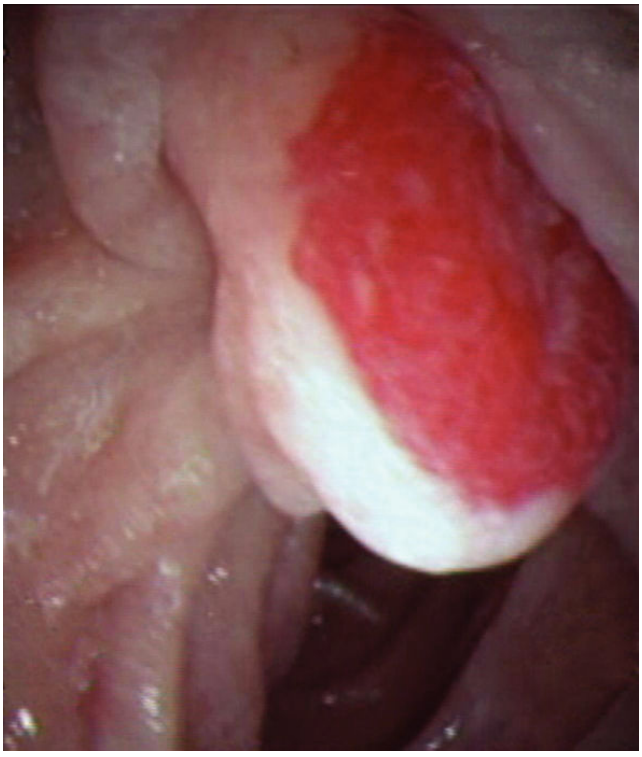

Figure 1 - Endoscopic image of the vascular lesion on the major duodenal papilla with complete involvement of the ostium (head arrow)

By means of papillectomy employing a 20-mm monofilament polypectomy snare, a cutting current of 45 W was used, followed by biliary papillotomy and placement of a 5Fr X 7 cm pancreatic plastic stent under fluoroscopic control, which was removed 3 weeks later. There were no complications from this procedure, and the patient was discharged within 2 days. Duodenoscopy, performed 60 days later, showed retraction of the resection bed with spontaneous drainage of clear bile.

Histology revealed an angiodysplastic vascular lesion with predominance of duodenal papilla arteriolar vessels.

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Angiodysplasia is the main cause of gastrointestinal bleeding of unclear origin, representing approximately 10% of the cases.[1] Endoscopic procedure is fundamental for the diagnosis of these lesions, and in selected cases it is also a therapeutic option.

Upper gastrointestinal endoscopy may fail to identify lesions located between nondistended gastric folds, in distal portions of duodenal folds, or also when there is abundant active bleeding. Nguyen et al[3] stated that only about 38% of the hemorrhagic lesions of the gastrointestinal tract found on push enteroscopy could be reached by a gastroscope.

Double-balloon enteroscopy and intraoperative enteroscopy may be useful for the establishment of diagnosis and for adjuvant therapy of the bleeding sources. Additionally, wireless capsule endoscopy has provided an improvement in the diagnosis of small-bowel diseases, although without therapeutic possibility. Enns et al[4] demonstrated that angiodysplasia occurs in approximately 61.2% of the cases of bleeding of unclear origin.

Treatment could be with hormonal therapy, endoscopic ablation, or resection and open surgery.

Prospective randomized controlled trials assessing the efficacy of estrogen as therapy are limited and conflicting. Lewis et al[5] compared results of 30 patients with bleeding angiodysplasia treated with Enovid or Premarin to 34 patients not receiving hormonal therapy. They concluded that there was no difference, and the therapy was ineffective for small bowel bleeding. However, Cutsem et al[6] treated 10 patients with bleeding vascular lesions who received 0.5 mg ethinyl estradiol and 1.0 mg norethisterone or placebo. After 6 months of follow-up, the authors showed that hormonal therapy might be beneficial for these patients, with no major complications

Endoscopic treatments are relatively simple to perform, and several methods with high efficacy are available. The hot biopsy forceps was the first device used to successfully treat these lesions for bleeding control in 47% to 81% of cases, although recurrent bleeding occurred in 53% of cases within 3 years. Serious complications occur in up to 9%, including 3% of perforation. Sclerotherapy is relatively simple: the technique is to inject the sclerosing agent into or beneath the lesion. However, few cases have been managed with this method, and the rate of complications has not been defined.[7]

Several trials have been performed with lasers (Nd-YAG). Foutch,[7] analyzing most studies assessing the efficacy of Nd-YAG, reported that control of bleeding was achieved in 71% to 87% of patients, and the recurrent bleeding (in 14-34%) was attributed to new lesions or incompletely treated lesions. Complications occurred in 4% to10% of the patients, and the main complication was hemorrhage.

Cello et al,[8] reported the use of an argon laser in 34 patients with vascular lesions. The authors reported that after 6 months, recurrent bleeding and transfusion were significantly reduced. Only 1 patient experienced a major complication (perforation).

Safe endoscopic resection may be possible, especially when the lesion is smaller than 10 mm and localized at the surface of the elevated lesion. The strip biopsy technique (lift and cut) can be used with few complications. Open surgery is mainly indicated when there is a single lesion larger than 20 to 30 mm, the location is not accessible to endoscopic procedure, or there is bleeding recurrence.

In the present case, the source of bleeding was confirmed as being papillary through the use of equipment with lateral-side viewing. In conclusion, we believe that duodenoscopy should be an important diagnostic tool in patients with upper digestive bleeding.

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