



An Unusual Gastrointestinal Bleeding

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The annual incidence of lower gastrointestinal bleeding has been estimated in France at 27 cases per 100,000 inhabitants [1] for an estimated mortality of between 2 and 4% [2]. The cause may in some cases be obvious or difficult to identify. One of these causes is undoubtedly among the rarest causes is the colonic Dieulafoy lesion (DL). It can be life-threatening. Its incidence in the general population is poorly estimated due to multiple clinical presentations ranging from obscure bleeding to obvious rectal bleeding. Nevertheless it is estimated between 1 and 2% of gastrointestinal bleeding. In order of frequency, digestive locations of DL are: Stomach 71%, duodenum 15%, esophagus 8%, rectum 2%, colon 2% and jejunum 1% [3].

We report the case of a 78-year-old patient with huge medical history, right salivary gland tumor in 2004, left breast mastectomy for neoplasia, lumbosacral arthrodesis in 2001, total hysterectomy, atrial fibrillation on rivaroxaban, amiodarone, gastroesophageal reflux disease, high blood pressure, chronic obstructive pulmonary disease with long-term oxygen therapy, 2 liters/min, 16 hours a day. Type 2 diabetes on Glyclazide. Fifteen days before hospitalization, she presented asthenia. Forty-eight hours before her hospitalization, she had a melena with hemoglobin at 72g/L on her arrival at the emergency room at night. The patient is haemodynamically stable, the melena is confirmed on digital rectal examination.

The day of onset was the same of her admission to the emergency ward, the patient presented with massive rectal bleeding with a drop in hemoglobin to 62 g/L, the patient was hemodynamically unstable, rivaroxaban was suspended, the patient was given esomeprazole electric seringue, transfused with 2 group O negative red blood cells with a control the next day (Day 1) with hemoglobin at 83 g/L. After the biological control we carry out the endoscopic examinations. Gastroscopy found a hiatal hernia by 1 cm slip, gastritis with large folds without objectified lesion, no objectified bleeding, probably vascular fundic gastropathy, isolated fundal angiodysplasia, normal bulb and duodenum, no objectified active bleeding. Colonoscopy made on Day 2 with control hemoglobin of 98g/L, found blood diffusely without active bleeding, despite washing with water we do not find the trigger zone of the bleeding, we visualize by elsewhere blood in the terminal ileum, predicting a probable intestinal origin. Abdominal CT angiography performed in the wake of colonoscopy. The small bowel capsule endoscopy after the tomography was normal.

On Day 4 Control hemoglobin at 88g/dL, she is transferred to another center and they could not find the origin of bleeding after gastroscopy and colonoscopy. The diagnosis was diverticular bleeding and the patient came back without active bleeding.

On day 8 after onset new episode of rectal bleeding with Transfusion of 2 (RCF) and 1 fresh frozen plasma (FFP), colonoscopy performed the same day: Blood with melena at the right angle, presence of stools, descent with significant lavage without active bleeding objectified. Discussion of the risk benefit of embolization or hemostatic colectomy acts very quickly challenged by the radiologist and the surgeon because vital prognosis reserved in the case in point. We therefore agree to the realization of a scintigraphy with ^{99m}Tc labeled red blood cells finally find the area of bleeding (Figure 1: Scintigraphy with erythrocytes labeled with Technetium 99m coupled with abdominal CT scan. It was a hemorrhagic micro lesion of the posterior face of the left transverse colon.). On day 10 Scintigraphy performed, trigger zone was find in the left transverse colon. On day 11: The colonoscopy performed shows a micro mucosal fissure through which active bleeding is noted. After the 5mL injection of Adrenaline® we placed 6 hemostatic clips (Figure 2:)

The patient will return home on day 27 following multiple secondary visceral dysfunctions which have been managed. Rivaroxaban has been replaced by Apixaban. The hemoglobin level at discharge was 94 g/L.

Discussion

The colonic Dieulafoy lesion (DLC) is an extremely rare lesion, at least in the literature. It represents 2% of DL. Several cases of DLC have been reported in the literature in the rectum, ascending colon, descending colon, sigmoid and rectum. It is preferentially proximal and rectal colic [4], only two cases of anal canal DL have been reported [5]. We have not found any reported case of transverse DLC. The DL is in most cases of pathologies of elderly people but cases of young subjects have been described [6] in addition to age, there are comorbidities in 90% of patients [7]. Our patient had a clinical profile found in most patients with Dieulafoy lesions: elderly woman with multiple comorbidities, on anticoagulants [8].

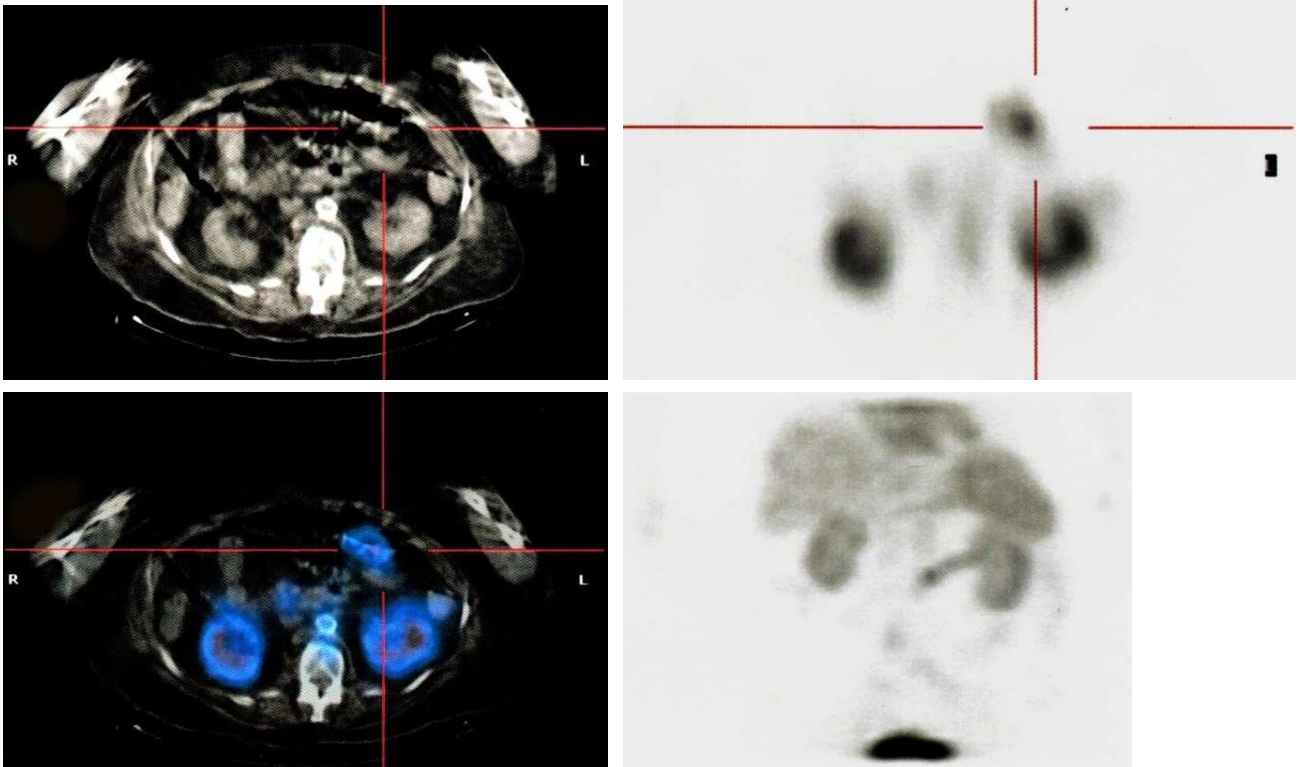


Figure 1: Scintigraphy with erythrocytes labeled with Technetium 99m coupled with abdominal CT scan. It was a hemorrhagic micro lesion of the posterior face of the left transverse colon.



Figure 2: Colonic lesion on which the clips are placed

The DL in our patient was a simple fissure with pulsatile oozing. DLs are in most cases pseudo-polypoid [9,10], sometimes a parietal vascular malformation of the aneurysmal type whose differential diagnoses reported in the literature are, in order of frequency, angiodysplasia [9] and stromal tumors [6]. The DL lesion may require multiple endoscopic examinations especially when the bleeding is intermittent. The pathophysiology of the lesion is very poorly understood, but certain histological studies carried out in the 1980s show an abnormal persistence of the caliber of the submucosal artery without parietal abnormality or inflammatory deposit [4, 11]. There are no cases in the literature of mucosal fissure as described in our clinical case. In the DL Diagnosis can sometimes be difficult with the need to perform up to more than 3 endoscopy procedures, as was the case with our patient. Another diagnostic method is angiography, widely used in English-speaking countries, and labeled red blood cell scintigraphy [8]. This last examination localizes the area of bleeding in 44% to 68% of patients if the bleeding persists and the bleeding rate is between 0.1 and 0.3 ml/min [12, 13]. This examination is available in France by few hospitals and it is not routinely prescribed by most of gastroenterologists. In our case it allowed this patient to avoid mutilating surgery or even a pejorative evolution with the performance of an arterial embolization. Approximately 50%-60% of upper GI tract DLs are active on endoscopic examination. This bleeding is typically in jet or oozing at the level of the digestive mucosa [6]. The treatment of DL is most of the time effective, whether in mono or dual endoscopic therapy [6]. But the use of surgery or arterial embolization is not exceptional [8]. Apixaban has been shown to cause less severe gastrointestinal bleeding in the elderly than other newer generation oral anticoagulants as well as Warfarin [14, 15, 16]. In our case after endoscopic treatment we had no bleeding recurrence.

Conclusion

Digestive bleeding due to Dieulafoy can be life threatened in some circumstances. The active search for bleeding trigger zone must be carried out the best therapeutic option. Labeled red cell scintigraphy still has a place in complicated cases such as the one presented here.

Epilogue: The patient is doing wonderfully 2 years after the events, has never had any gastrointestinal bleeding and her current hemoglobin is 12.2g/dL.

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