Fellows’ Corner

Rectal Dieulafoy’s Lesion Presenting as Massive Lower Gastrointestinal Bleeding

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CASE REPORT

A 59 years old female recently started on anticoagulation presented with massive painless rectal bleeding. Her medical history included Diabetes, hypertension and a recent CVA. Initial examination revealed tachycardia (130/minute) and hypotension, which responded to volume resuscitation. Initial labs: HCT - 24 (baseline 34), PLT - 189, PT - 32.3, INR - 6.90. She received 9 units of PRBC’s and 6 units of FFP’s within 24 hours of admission. An urgent colonoscopy after 1 gallon of polyethylene glycol revealed fresh blood in the left colon, otherwise normal colonic mucosa until the cecum. Terminal ileum was normal. On withdrawal of the scope, a large visible vessel over an area of raised mucosa was seen in the rectum (Figure 1) approximately 5 centimeters inside the anal verge. No active bleeding was observed from the lesion. The surrounding mucosa appeared normal. EGD was normal.

The patient underwent transanal excision of the lesion with wide margins. Histopathology showed mucosal ulceration corresponding to the area of bleeding and a large tortuous artery that did not taper during its passage through the mucosa (Figure 2 and 3). No recurrence was there after 6 months of follow-up.

Figure 1. Endoscopic appearance of Rectal Dieulafoy’s lesion.

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DISCUSSION

A Dieulafoy’s artery is a large, submucosal, tortuous, and thick-walled artery measuring between 2–8 mm in diameter. Histologically, the artery is completely normal without evidence of ulceration or inflammation in the overlying mucosa. It occurs as a result of nonreduction in the caliber of the arteries as they penetrate and branch through the gastrointestinal tract wall. Damage to the overlying mucosa by mechanical pressure of the arterial pulsations, and subsequently erosion of the arterial wall leads to profuse bleeding.

Dieulafoy’s lesion may be found in any part of the gastrointestinal tract but is most commonly seen in the stomach (1,2). The presentation of a patient with suspected Dieulafoy-like lesion can be variable with a majority of patients presenting with hematochezia and potentially life-threatening hemorrhage. Both sexes can be affected at any age. It is rarely seen in other parts of the GI tract and is extremely rare in the rectum with less than 10 cases reported (3,4).

The diagnosis depends on the endoscopic visual criteria that include active spurting or micropulsatile streaming from minute (<3 mm) mucosal defects or through normal surrounding mucosa, visualization of a protruding vessel with or without active bleeding within a minute mucosal defect or through normal-appearing mucosa, and fresh, densely adherent clot with a narrow point of attachment to a minute mucosal defect or to a normal appearing mucosa.

Although the appropriate management of Dieulafoy’s lesion in extragastric sites is controversial, it appears that endoscopic therapy should be the first line of treatment (5), especially in high-risk surgical patients. In our patient, we opted for surgical intervention because of size of the lesion, no active bleeding at the time of evaluation and the need for long term anticoagulation in our patient.

References