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CASE REPORT

Colonic hemangioma, a diagnostic challenge in young adults with lower gastrointestinal tract bleeding

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Abstract Colonic hemangiomas, first reported in 1839, are a rare and often misdiagnosed cause of lower gastrointestinal tract bleeding. We report a case of a 15-year-old girl who presented with the passage of bright red blood after defecation. Diagnostic studies, including plain abdominal radiography, barium enema study, computed tomography scan, magnetic resonance imaging, and colonoscopy, revealed characteristics specific to a diagnosis of colonic hemangiomas. Awareness of the clinical features of colonic hemangiomas may help avoid inappropriate surgical intervention in these patients.

1. Introduction

Lower gastrointestinal tract bleeding is a common clinical problem. In most cases, hemorrhoids or inflammatory colitis is the most common cause of lower gastrointestinal tract bleeding in young adults; however, the medical community should remain aware of the less common causes. For example, colonic hemangioma, first reported in 1839, most commonly presents as rectal bleeding in young adults,[1] and despite many cases being reported worldwide,

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it is still commonly misdiagnosed. Up to 80% of patients with colonic hemangioma have undergone unnecessary surgical procedures such as hemorrhoidectomy, and the average delay in diagnosis is 19 years.[2]

2. Case Report

A 15-year-old girl was referred to our hospital for the evaluation of the intermittent passage of bright red blood after defecation over the previous 3 weeks. She complained that since childhood she had experienced difficulty defecating followed by watery stool, and additionally experienced intermittent abdominal cramps that were relieved after defecation. Occasionally, she could palpate a mass in her left lower abdomen, and her symptoms had worsened over the past 6 months. She had also noted slight anal bleeding since childhood, for which she had not sought medical attention because she considered it due to her difficulty in defecation. A physical examination did not reveal any abnormalities. Unexpectedly, multiple phleboliths, clustered centrally at the sacrococcygeal level, were identified on plain abdominal radiographs (Figure 1). Abdominal sonography revealed an irregular heteroechogenic mass in the pelvis. The computed tomography (CT) scan of the abdomen, which was performed for evaluation of the pelvic mass, showed segmental bowel wall thickening of the rectosigmoid (RS) colon and multiple phleboliths (Figure 2). The results of a barium enema revealed nodular filling defects of the mucosal wall at the RS junction (Figure 3), and a colonoscopy showed bluish submucosal lesions with widened varices. T2-weighted fat-suppression magnetic resonance imaging (MRI) revealed heterogeneous high-signal-intensity lesions over the RS colon wall and pericolic fat. T1-weighted gadolinium-enhanced MRI revealed worm-like tubular structures in the lesion. After completion of these studies and discussion with the patient and her family, we performed an exploratory laparotomy, during which a 15-cm segment of the RS colon was observed to have diffusely engorged vessels with multiple calcifications in the pericolic fat (Figure 4). These tumors were completely removed by anterior resection, and end-to-end anastomosis was performed. Macroscopically, the surgical specimen showed worm-like tubular structures from the submucosa invading the pericolic fat, which was compatible with what was seen on the MRI. Histological examination showed multiple dilated, irregular

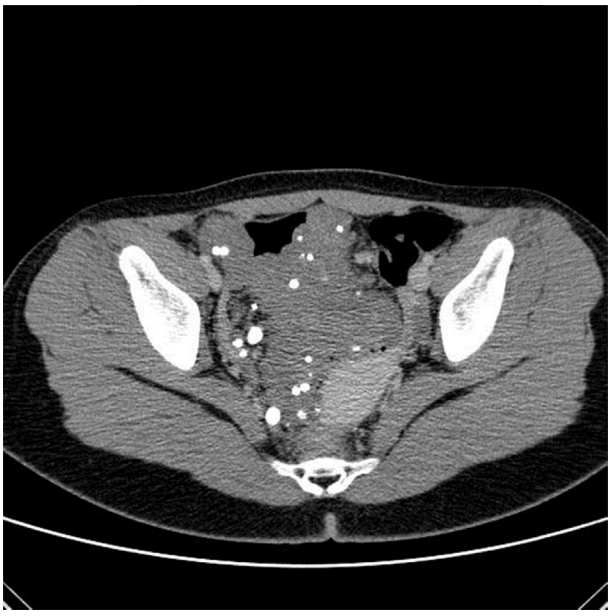

Figure 2 Abdominal CT scan showing increased bowel wall thickness with heterogeneous enhancement and multiple phleboliths. CT = computed tomography.

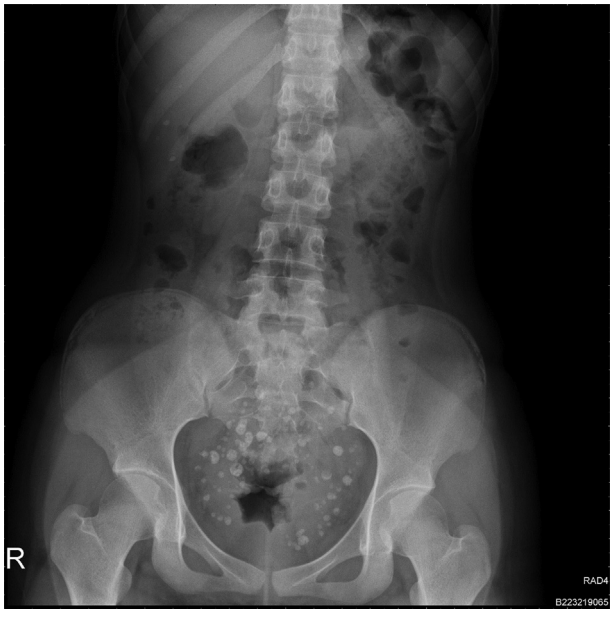

Figure 1 Abdominal radiograph showing centrally clustered phleboliths at the sacrococcygeal level relative to the anatomic position of the rectosigmoid colon.

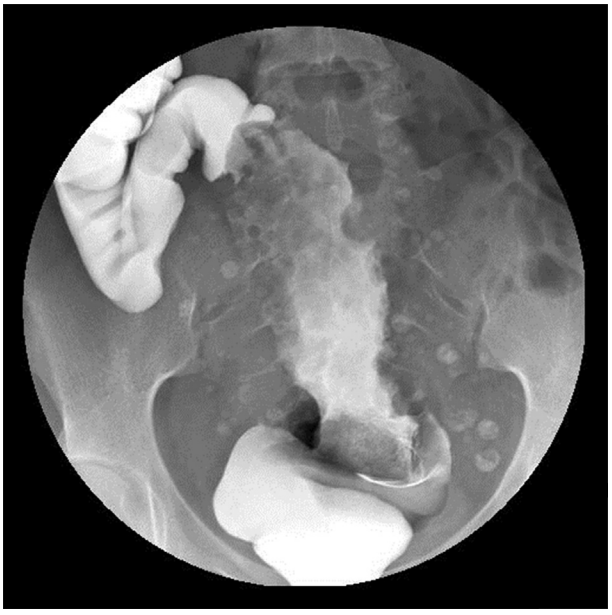

Figure 3 Barium enema showing multiple nodular filling defects of the mucosal wall at the rectosigmoid junction.