



Solitary Rectal Ulcer Syndrome Mimicking Rectal Neoplasm on Colonoscopy

Samer Talib, Mohamed Alani* and Nisar Ahmed*

Department of Gastroenterology, Park Plaza Hospital, Texas, USA

Abstract

We describe a highly unusual case of solitary rectal ulcer syndrome in a 90 years old African American female patient with a history of distal sigmoid colon resection for colon cancer with hysterectomy for uterine cancer. This patient presented with constipation, abdominal discomfort. Rectal showed positive fecal occult blood test. This finding raised suspicion for a possible recurrent malignancy. Colonoscopy shows the presence of an ulcerative rectal lesion. Histopathology study of the Biopsy showed granulomatous lesion with no evidence of neo plastic tissue.

Introduction

Solitary Rectal Ulcer Syndrome (SRUS) is a rare benign disorder characterized by a combination of symptoms, endoscopic findings, and histological abnormalities [1]. It was first described by Cruveilhier [2,3] in 1829. When he reported four unusual cases of rectal ulcers. A disorder, with an estimated annual prevalence of one in 100000 persons. It is a disorder of young adults, occurring most commonly in the third decade in men and the fourth decade in women. Men and women are affected equally, with a small predominance in women [4,5]. However, the solitary rectal ulcer is a misnomer because ulcers are found in 40% of patients, while 20% of patients have a single ulcer, and the rest of the lesions differ in shape and size, including hyperemic mucosa to broad-based polypoid lesions [6]. There is even a suggestion that the disease process also may involve the sigmoid colon [7,8].

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*Correspondence:

Nisar Ahmed, Department of Gastroenterology, Park Plaza Hospital, Houston, Texas, USA, Tel: +1-346-234-7207;

E-mail: nabosha2013@gmail.com

Mohamed Al Ani, Department of Gastroenterology, Park Plaza Hospital, Houston, Texas, USA, Tel: 336-740-5303;

E-mail: mohammed.s.hatem@gmail.com

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Case Presentation

A 90-year-old African American lady, presented to the outpatient clinic with low abdominal pain and constipation. The patient complained of a feeling of incomplete evacuation. There was no associated nausea or vomiting. Past medical and surgical history was significant. She had colon resection for distal sigmoid colon cancer. She also had a history of hysterectomy for uterine cancer. Clinical examination showed typical vital signs, her abdomen was soft and not tender. On rectal examination there was a finding of positive fecal occult blood. CBC and electrolytes were normal. Colonoscopy was performed with the indications of possible recurrent cancer, gastro-intestinal occult blood loss and iron deficiency anemia.

On colonoscopy

An ulcerated none obstructing large mass was found in the rectum. The mass was non-circumferential and 2 cm in length with 14 mm in diameter (Figure 1). No active bleeding was present. Specimens were sent for biopsy with high suspicion of malignancy. The patient was put on mesalamine 1 Gm. Suppositories BID and she was referred to a colorectal surgeon for consultation and management. However, biopsy showed granulation tissue and fibro purulent debris No malignancy was reported in fact no neoplastic tissue was seen in the biopsies (Figures 2 and 3). The Colorectal surgeon saw the patient in his office some three weeks after her finding of the "mass" and did a proctoscopy and reported that the ulcer was healed and the surrounding edematous tissue had entirely resolved apparently in response to the mesalamine which is an anti-inflammatory medication. Biopsy report came out negative for malignancy. Multiple fragments of granulation tissue and fibrinopurulent debris were appreciated and thus the diagnosis of solitary rectal ulcer syndrome was made.

Discussion

This report illustrated an unusual case of solitary rectal ulcer syndrome, a rare benign disorder with an unknown etiology. Patients with SRUS typically present with rectal bleeding, constipation,



Figure 1: Shows ulcerated "mass" in the rectum, on colonoscopy.

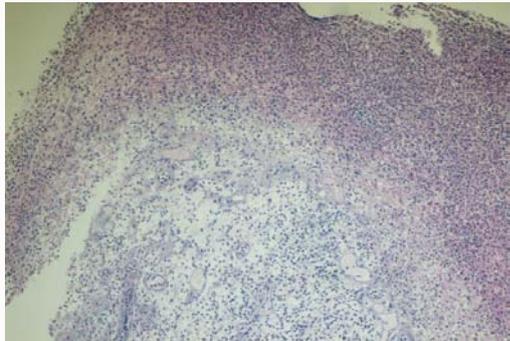


Figure 2: Shows presence of granulomatous and fibro-purulent debris.

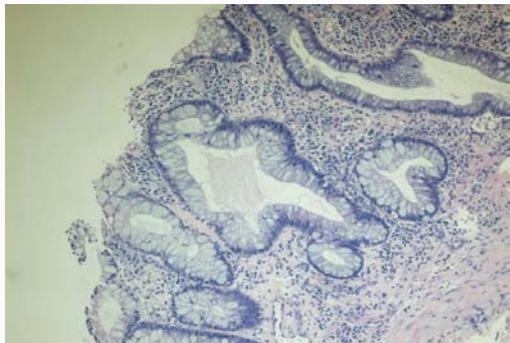


Figure 3: Same as above in the high power field.

straining at stool, however according to studies [1] there are some atypical cases where patients were either asymptomatic or presented with alterations of bowel habits. In some other reviews [1] patients, as the name suggests would have a solitary ulcer, but 50% of the patients may get polyps rather than an ulcer and 10% may get multiple lesions. The term SRUS is therefore a misnomer.

One theory is that high rectal pressure causes the submucosal blood vessels to either dilate or rupture leading to devitalization. This high pressure can be due to internal intussusceptions, hard stool straining or external anal sphincter hyperactivity [9]. Abnormal rectal evacuation due to paradoxical contraction of the puborectalis muscle may also play a role in the etiology of this disease [2,10]. A third theory suggests pudendal neuropathy leading to anal sphincter

weakness, rectal hyperactivity and thus prolapse of the rectal mucosa [4]. Endoscopic findings are also varied and can include single or multiple ulcers, polyps, or hyperemic mucosa [11]. Histopathological examination is a gold standard for the diagnosis of SRUS. A fibroblast and smooth muscular obliteration of the lamina propria, crypts' distortion, and surface serration can establish the diagnosis in most cases [6]. The degenerative-regenerative process occurring in the mucosa may cause such changes [6]. Some pathological studies reveal cases where thrombosis, fibrin deposition and atherosclerosis could be appreciated [12]. Diamond-shaped crypts were valued by Warren [7]. Tendler et al. [6] also identified mucosal capillary abnormalities, including dilatation, congestion, and thrombosis. It is important to note that these pathological findings are varied and diverse and can be affiliated with multiple disorders e.g. inflammatory bowel disease, irritable bowel syndrome or adenoma.

Most respond well to laxatives, enemas and bowel retraining. Our patient above was treated with mesalamine suppositories 1gm, twice a day and did very well with complete resolution.

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