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Case Report

An Uncommon Presentation of a Common Rectal Condition

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1. Abstract

We report a case of Solitary Rectal Ulcer Syndrome (SRUS) whose colonoscopy showed a rectal mass whose large pale appearance was uncommon and should be remembered as a presentation of SRUS. SRUS is a chronic, benign disorder commonly caused by constipation - clinical features can comprise of rectal bleeding, passage of mucous, rectal pain, tenesmus, incomplete evacuation, straining on defecation and rectal prolapse. Conservative management or surgical management is offered based on symptomology. We want to illustrate a different thinking process -a rectal mass should not always be considered a potential malignant threat. Even though SRUS is rare as compared to colorectal cancer, the high global prevalence of constipation means that SRUS should not be completely ignored.

2. Keywords: Solitary rectal ulcer syndrome; Rectal mass; Constipation; Colorectal cancer

3. Introduction

The prevalence of Solitary Rectal Ulcer Syndrome (SRUS) is estimated to be 1 in 100000 with an equal distribution amongst males and females at any age [1]. According to a study, one of the differentials concerning a suspected case of SRUS includes malignancy [2]. Moreover, the global burden of Colorectal Cancer (CRC) is expected to increase by 60% to more than 2.2 million new cases and 1.1 million deaths by 2030 [3].

Such statistics always make malignancy our top differential in a patient with a rectal mass. However, this should not set a trend of always assuming a case of malignancy in the presence of a rectal mass. We describe a case of SRUS whose colonoscopy showed a pale rectal mass and perianal ulceration-findings that direct us more towards malignancy. However, we aim to put forth a point that not every rectal mass deserves the same typical thought process - a benign differential such as SRUS should also be considered.

4. Case Report

An informed consent had been taken from the patient. A 72-year-old female, known case of osteoarthritis and longstanding constipation, reported to the general surgery clinic with complains of perianal swelling for the past 6-7 months, painful defecation and failure to evacuate feces without anal digitization for the past 1-2 years. Episodes of fresh bleeding per rectal not mixed with stool reported 8-9 months back.

An examination under anesthesia and biopsy of perianal region was performed a year ago which revealed a chronic non-healing rectal ulcer. Moreover, a CT scan with contrast of the abdomen and pelvis from outside Pakistan in January 2018 revealed circumferential mucosal thickening of the anal and anorectal junction with multiple surrounding lymph nodes likely - a possibility of malignancy was raised. Upon examination in the clinic, the patient was found to have a hypertrophic perianal area with a 2x2 cm ulcer protruding and the hypertrophy extended into the anal canal - rest unremarkable. The patient was then recommended colonoscopy and biopsy.

Colonoscopy revealed a rectal mass, perianal ulceration with hypertrophied skin with tags (Figure 1). Biopsy of the mass showed rectal mucosa showing ulceration, distorted crypt architecture and smooth muscle splaying in the lamina propria, overall favouring features of solitary rectal ulcer and negative for malignancy (Figure 2). A repeat colonoscopy and biopsy also showed the same result.

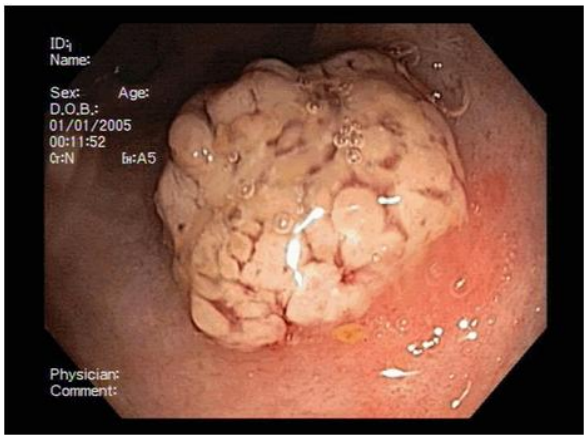

Figure 1: Rectal mass with hypertrophied skin.

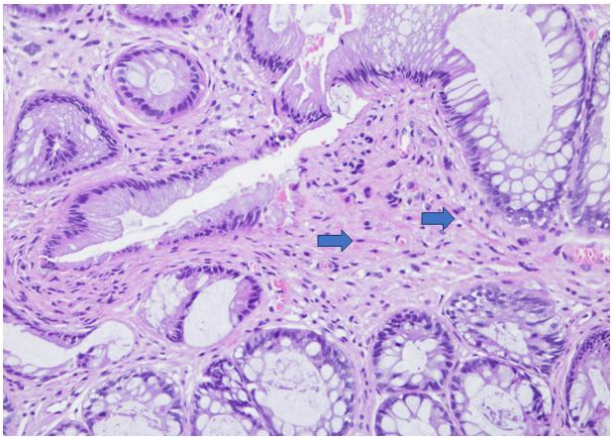

Figure 2: High power view of rectal mucosal biopsy exhibiting distortion of crypt architecture with thin smooth muscle fibers in the lamina propria (arrows) making it appear more eosinophilic. These findings are consistent with solitary rectal ulcer. (H&E, 20X)

5. Discussion

Solitary Rectal Ulcer Syndrome (SRUS) is a chronic, benign disorder with features consistent with single or multiple ulcerations of the rectal mucosa - associated with abnormal defecation with the passage of blood and mucus [4]. The pathogenesis is attributed to conditions leading to trauma and ischemia – mucosal prolapse, which causes venous congestion, ischemia and edema in the mucosal lining, is the most common mechanism for SRUS [4].

Clinical features include rectal bleeding, passage of mucous, perineal or rectal pain, tenesmus, incomplete evacuation, straining on defecation and rectal prolapse [4]. The name SRUS in a misnomer-it can manifest as multiple ulcers, hyperemic mucosa or a broad-based polypoidal mass [4]. Moreover, the diagnostic modality of choice is biopsy - typical histopathological features include fibro muscular obliteration of the lamina propria, crypt distortion and disorientation of muscle fibers [4].

Treatment is based on symptomology - mildly symptomatic or asymptomatic patients are treated with bulk laxatives, high fiber diet, bowel retraining, avoidance of anal digitization and behavioral changes to prevent straining [5]. Surgery is resorted when the patient has severe symptoms for example, secondary to rectal prolapse or is resistant to conservative treatment.

According to a study, SRUS is often caused by chronic constipation [6]. Furthermore, a strong history of constipation means that a patient presenting with a rectal mass may have SRUS, and so our approach should consider it despite its overall low prevalence.

6. Conclusion

An important part of a clinician's job is to prioritize the differentials of a particular condition - our case details stated features such as painful defecation and per rectal bleeding which are considered strong indications towards malignancy. With an already strong emphasis on colorectal cancer screening worldwide and a rectal mass on colonoscopy in this case, the thinking process inevitably would be far away from rare and less severe conditions like SRUS. However, as our case unraveled following biopsy results, it can be concluded well that not every rectal mass should alarm physicians along the lines of malignancy and other possibilities such as SRUS should be considered despite its low probability - more importantly in the setting of a high worldwide prevalence of constipation and an unusually pale mass. This approach will immensely improve our patient counseling as it would encompass a wider spectrum of possibilities.

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