

A Rare Cause of Occult Gastrointestinal Bleeding: Solitary Rectal Ulcer Syndrome

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ABSTRACT

Occult gastrointestinal (GI) bleeding is defined as iron deficiency anemia or positive fecal guaiac test results without obvious bleeding. There are multiple reasons for occult GI bleeding. Despite its rarity, solitary rectal ulcer syndrome (SRUS) can result in occult bleeding. Here we will discuss a case of SRUS.

Keywords: Occult gastrointestinal bleeding, solitary rectal ulcer, dyssynergic defecation

INTRODUCTION

Occult gastrointestinal (GI) bleeding is the presence of a positive fecal occult blood test and/or iron deficiency anemia in the absence of visible blood loss. Common causes of occult GI bleeding include esophagitis, erosive gastritis, peptic ulcer, colon polyps and cancer, inflammatory bowel disease, vascular ectasias, portal hypertensive gastropathy, gastric antral vascular ectasias, and small bowel tumors [1,2]. Although a solitary rectal ulcer usually causes rectal pain and obvious GI bleeding, it can sometimes cause occult GI bleeding [3]. Here we present a patient with solitary rectal ulcer syndrome (SRUS) who presented with occult GI bleeding.

CASE PRESENTATION

A 45-year-old male patient was referred to our clinic with iron deficiency anemia. The patient had no complaints except fatigue. There was no history of melena, hematochezia, or hematemesis. In anamnesis, it was learned that he spent a long time in the toilet, strained a lot, and had the feeling of incomplete evacuation after defecation. These symptoms have existed for a long time. He had no known chronic diseases or medication use. Physical examination did not reveal any pathological findings. Laboratory investigation revealed hemoglobin of 12.4 g/dL, mean corpuscular volume 78, and ferritin 15 mL/ng. The patient underwent upper endoscopy and colonoscopy. Upper endoscopy was normal. Colonoscopy revealed two oval-shaped ulcers, approximately 20 mm in

diameter, with white clean base exudate on the second and third Houston valves. SRUS was considered, and biopsies were taken from the ulcer edges to rule out malignancy (Figure 1). The pathology result was reported as a benign ulcer. The patient was administered behavioral therapy. Fiber diet, fluid intake, and topical sucralfate treatment were recommended as first-line treatment.

DISCUSSION

SRUS was first described by Cruveilhier [4] in 1829. The disease has an annual prevalence of 1 in 100,000 people. It occurs most frequently in the third decade in men and in the fourth decade in women, and it can also be seen in young adults. The term SRUS is misnomer because only a quarter of patients have a

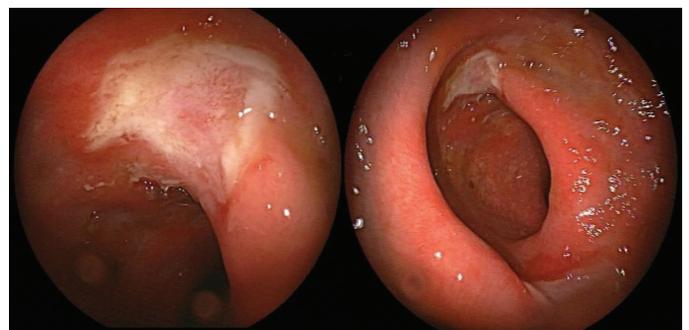


Figure 1. Colonoscopy image shows two white clean base ulcers



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Received: 06.11.2023 **Accepted:** 04.03.2024



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single ulcer. In most cases, multiple ulcers of different shapes and sizes are observed [5]. Two ulcers were present in our patient.

Multiple factors may play a role in the underlying etiology, although it is not fully understood. Direct trauma or local ischemia is the most widely accepted theories. It has been suggested that excessive straining during defecation can lead to trauma and compression of the anterior rectal wall on the upper anal canal, which can cause ischemic damage [6]. Studies have shown that 82% of patients with SRUS may have dyssynergic defecation [7]. Our patient's history was consistent with dyssynergic defecation, which included incomplete evacuation and excessive straining.

Clinical findings of SRUS include rectal bleeding, mucus discharge, and perineal and abdominal pain [8]. The amount of blood varies from small amounts of fresh blood to severe bleeding that requires blood transfusion. However, cases presenting with occult GI bleeding are rare [3]. The diagnosis of SRUS is based on clinical features, rectosigmoidoscopy, and histological examination. A comprehensive history is crucial for SRUS diagnosis. Differential diagnosis includes inflammatory bowel disease, ischemic colitis, and malignancy [9]. It has been reported that the ulcer is usually on the anterior wall of the rectum. The shape and diameter of ulcers can vary but are usually 1-1.5 cm. The ulceration is superficial, and the mucosal membrane surrounding it may be nodular, lumpy, or granular. To exclude other diseases, biopsies should be taken from the ulcer edge and normal or abnormally appearing colon mucosa [3].

The first step for treating SRUS is patient education [10]. In particular, asymptomatic patients may not require any treatment except for behavioral changes. Other suggestions for treatment include encouraging a high-fiber diet, avoiding straining, regulating toilet habits, and improving psychosocial factors. Biofeedback therapy is recommended for patients with dyssynergic defecation who do not respond to treatment [10]. For symptomatic ulcers, topical treatments, including sucralfate, salicylates, corticosteroids, and mesalazine, have been reported to be effective in improving symptoms [11].

In conclusion, patient history is crucial when investigating patients for occult GI bleeding. SRUS should be considered in patients with a history compatible with dyssynergic defecation. Patient education is the initial step in managing SRUS. In symptomatic cases, sucralfate and salicylate treatment can be used.

Ethics

Informed Consent: The patient's written informed consent was obtained.

Authorship Contributions

Surgical and Medical Practices: A.A., Concept: İ.D., Design: A.A., Data Collection or Processing: A.A., Analysis or Interpretation: İ.D., Literature Search: A.A., Writing: A.A.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

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