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# Laparoscopic Ventral Rectopexy for the treatment for Solitary rectal ulcer- a good choice?

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### ABSTRACT

Solitary rectal ulcer syndrome (SRUS) is an uncommon benign disease characterized by a combination of symptoms, clinical and histological findings, where men and women are affected equally, with a small predominance in women. Various treatment strategies have been advocated, ranging from conservative management to a variety of surgical procedures. Can laparoscopic ventral rectopexy be a good alternative for patients who do not respond to conservative treatment? Given the rarity of this pathology, we chose to present the case.

**Keywords:** Solitary rectal ulcer syndrome, Treatment; Laparoscopic ventral rectopexy.

**Abbreviations:** SRUS (Solitary rectal ulcer syndrome); BFT (biofeedback therapy); 5-ASA (5-aminosalicylic acid)

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## Introduction

The solitary rectal ulcer syndrome [SRUS] is an uncommon benign disease, characterized by a combination of symptoms, clinical findings and histological alterations [1]. It is a rare condition in children and in adults it has a small predominance in females. The prevalence of SRUS, although not exactly clear, is estimated at 1/100,00 people per year [2]. This pathology is easily confused in clinical practice and it should be noted that it is often misdiagnosed with other diseases due to the lack of knowledge or experience of doctors facing this challenging condition. The etiology of SURS remains obscure and apparently multifactorial, the most accepted theories are associated with causes of local ischemia or direct trauma [2]. It has been suggested that abnormal contraction of the puborectalis muscle and the descent of the perineum during defecation result in compression and trauma of the anterior rectal wall on the anal canal, prolapsed rectum and internal intussusceptions [3].

25% of patients with SURS [Solitary rectal ulcer syndrome] can be asymptomatic. SURS can manifest itself with non-specific symptoms such as anal pain, tenesmus, straining, rectal bleeding and constipation or diarrhea. More than 50% of patients suffer from constipation, on the other hand, 20-40% can have diarrhea. [4]

The diagnosis is based on clinical, endoscopic and histological findings. [5] Biopsies are needed to confirm the diagnosis and are very important

to exclude differential diagnosis. It is important to distinguish SURS from other disorders like idiopathic inflammatory bowel disease, infectious diseases, rectal cancer, endometriosis, and drugs which may have similar clinical presentations. [4]

Because this pathology is often difficult to treat, several strategies have been advocated, from conservative treatment to a variety of surgical procedures. The treatment of SRUS is based on the severity of the symptoms and on the presence of rectal prolapse [1]. The first and main steps in the treatment of SRUS are education and behavior modification. Many asymptomatic patients benefit from biofeedback therapy [BFT] and lifestyle changes [eg, high fiber diet, drinking plenty of water, regular toilet time, treating psychological problems, and preventing anal straining]. Patients with more severe symptoms may need medical and surgical treatment. The effectiveness of topical treatments like sucralfate, 5-ASA, sulfasalazine, and corticosteroid enema, ranges from 28-80% , by reducing the inflammation and preventing irritation lesions. [6,7] Surgery is recommended for refractory cases of SRUS. Rectal prolapse surgery [rectopexy procedure], surgery to remove the ulcer [Delorme procedure] or rectal excision [Altemeier perineal proctectomy] are the main procedures performed for the treatment of SURS. [4,8] It should be noted that improvement in clinical symptoms does not mean endoscopic cure [4].



Fig.1 Colonoscopy, single ulcerated lesion in the middle rectum.

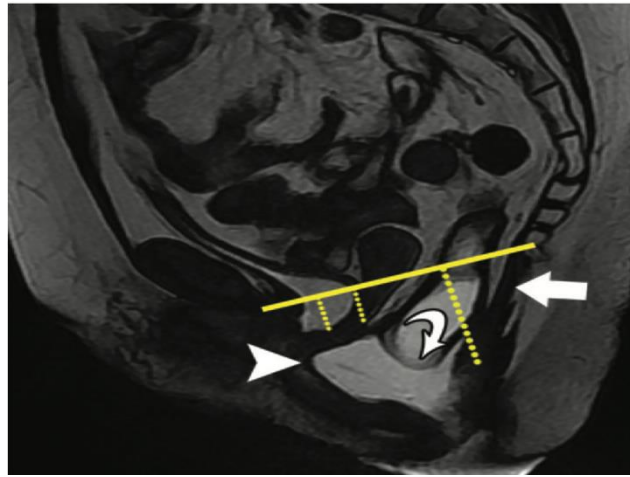


Fig 2. Descending perineal syndrome, pelvic magnetic resonance

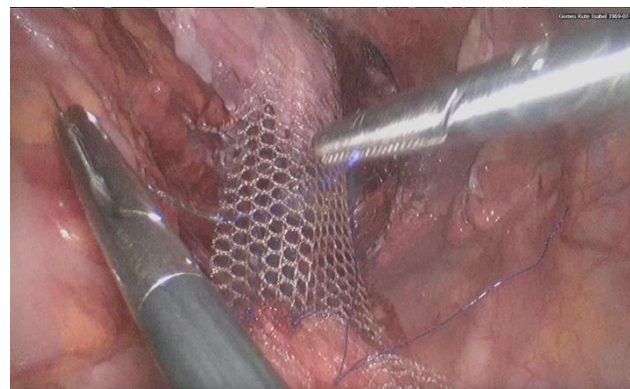


Fig 3. Laparoscopic Ventral Retopexy -Fixation de mesh to the promontori

## Case Presentation

The present case reported a 50 years old woman, referred to gastroenterology due to complaints of proctalgia associated with chronic diarrhea and a small rectal prolapse. The patient was submitted to a colonoscopy where a single ulcerated lesion in the middle rectum was identified and biopsied [Fig 1] and whose histological findings identified “fragments of the distal mucosa with erosions associated with pseudopolypoid, with chorion fibrosis and glandular atrophy.” During 20 months, the patient was submitted to medical treatment by gastroenterology with dietary modifications, laxatives, and enemas of sulfasalazine and corticosteroids, without clinical improvement. Due to the persistence of complaints and of the rectal ulcer, we carried out a functional study of the pelvic floor using a pelvic MRI [Fig 2] and rectal manometry, confirming a moderate rectal prolapse, with pathological descent of the pelvic

floor. Surgical treatment was proposed, Laparoscopic Ventral Rectopexy [Fig 3], which was accepted by the patient. Surgery was performed without complications and the patient was discharged after 48h.

## Discussion

SURS is a misleading syndrome. Management of this condition is challenging due to its unclear pathogenesis, varied presentation, and lack of evidence-based treatment guidelines. The severity of the symptoms and the presence or absence of rectal prolapse are important factors for the available treatment options. It should be noted that a conservative, stepwise, patient education and behavioral modification are the first proposed strategies [1,9].

Our patient was treated with different conservative measures [diet, laxatives, and enemas of sulfasalazine and corticosteroid], but with little improvement and frequent relapses. Treatments with sulfasalazine and

corticosteroids, used in inflammatory bowel disease, have been tried in SRUS, but they are suggested only by empirical and non-controlled studies, with varying responses. It is noteworthy that conservative management, patient education, fiber consumption, and behavioral modification are the first strategies that can be applied at an early stage <sup>[10,11]</sup>.

Surgical treatment is recommended for patients who do not respond to conservative treatment or some patients with complete prolapse. <sup>[12]</sup> When surgery is proposed, Rectopexy should be considered as first-line treatment, but other procedures can be proposed [Delmore procedure; Altemeir perineal proctectomy; local excision <sup>[13]</sup>.

In our case report, the patient was proposed for laparoscopic ventral retopexy. The patient maintained follow-up with General Surgery and Gastroenterology. There are no complications related to the surgery performed. At the first evaluation, two weeks after surgery, the patient was clinically better, without pain and with diminished bowel movements. Six months after surgery, rectosigmoidoscopy demonstrated rectal ulcer cicatrization.

## Conclusion

SRUS is a nonspecific entity with various presentations. The cause is primarily unknown; however, ischemic mucosal injury frequently associated with rectal prolapse seems to be the most likely pathogenic factor. Diagnosis requires a high index of suspicion of not only the physician but also the pathologist. Nowadays, there is no consensus on the treatment for SRUS, reports of larger series and long-term follow-up are required for the establishment of conservative and surgical treatment protocols. However, in our clinical case, laparoscopic ventral rectopexy was a successful approach in a patient without improvement to conservative treatment.

## Acknowledgements

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## Conflict of interest

None

## References

- [1]. Qing-Chao Z;Rong-Rong S;Huan-Long Q;Yu W;"Solitary rectal ulcer syndrome: Clinical features, pathophysiology, diagnosis and treatment strategies"; World J Gastroenterol. 2014 Jan 21; 20[3]: 738–744. doi: 10.3748/wjg.v20.i3.738
- [2]. Mojgan F;Mohammad D;"Solitary rectal ulcer syndrome. A systematic review"; Medicine.2018; 97:18; doi.org/10.1097/MD.00000000000010565
- [3]. Tandon RK, Atmakuri SP, Mehra NK, Malaviya AN, Tan- don HD, Chopra P. "Is solitary rectal ulcer a manifestation of a systemic disease?". J Clin Gastroenterol 1990; 12: 286-290 DOI: 10.1097/00004836-199006000-00010
- [4]. Sadeghi A; Biglari M; Adibi P;"Solitary Rectal Ulcer Syndrome: A Narrative Review". Middle East Journal of Digestive Diseases, 28 Jun 2019, 11[3]:129-134 DOI: 10.15171/mejdd.2019.138
- [5]. Geramizadeh R;Baghernezhad M, and Jahanshani A;"Solitary Rectal Ulcer: A Literature Review"; Ann Colorectal Res. 2015 December; 3[4]:e33500 ; doi: 10.5812/acr.20749
- [6]. Saeed A, Narjes T, Yamini M, Bagheri M, Sadeghi A,et al; "Solitary rectal ulcer syndrome: addition of rectal therapies to biofeedback is more effective than biofeedback alone"; Gastroenterol Hepatol Bed Bench 2019;12[3]:197-202].
- [7]. Yousef Q, Mahmoud M; "A systematic review and meta-analysis of the efficacy of medical treatments for the management of solitary rectal syndrome;" Saudi J Gastroenterol 2020;264-12; doi: 10.4103/sjg.SJG\_213-19
- [8]. Badrek-Amoudi A; Roe T;Mabey K,Carter H;et al; "Laparoscopic ventral mesh rectopexy in the management of solitary rectal ulcer syndrome: a cause for optimism?"; ColorectalDisease. 15, 575–58 ; codi.12077
- [9]. Swatton A;"Solitary rectal ulcer syndrome: physiology and treatment options;" British Journal of Nursing, 2009,Vol 18, No 21;
- [10]. Chiang JM, Changchien CR, Chen JR; "Solitary rectal ulcer syndrome: an endoscopic and histological presentation and literature review"; Int J Colorectal Dis [2006] 21: 348–356 ; DOI 10.1007/s00384-005-0020-6 ;
- [11]. Torres C, Khaikin M, Bracho J et al."Solitary rectal ulcer syndrome: clinical findings, surgical treatment, and outcomes." Int J Colorectal Dis [2007] 22:1389–1393 ; DOI 10.1007/s00384-007-0344-5
- [12]. Gouriou C;Chambaz M;Ropert A;Bouguen G;Desfourneaux V; "A systematic literature review on solitary rectal ulcer syndrome: is there a therapeutic consensus in 2018?"International

Journal of Colorectal Disease, 2018;  
doi.org/10.1007/s00384-018-3162-z

- [13]. Gourioua C; Chambaz M; Ropertb A; Bouguena G; Venarae A; et al. "Management of solitary rectal ulcer syndrome: Results of a French national surgery". Digestive and Liver Disease 2020; 16:50; doi.org/10.1016/j.dld.2020.05.013

