Highlighting the role of nonsurgical (conservative) method in the management of complete rectal prolapse in an Indian male

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ABSTRACT

We report a case of a 35-year-old male who presented to our emergency room with debilitating, complete, irreducible, edematous rectal prolapse along with retention of urine. Due to marked edema and inflammation, the reduction was unsuccessful under general anesthesia; hence a conservative approach was considered. With local sugar application for a week, the edema was reduced and via manual digital maneuver, the prolapse was reduced with anal encirclement the day after to maintain the reduction. With our experience, where laproscopic facilities were unavailable, we wish to highlight the role of nonsurgical/conservative conventional methods of management of such severe cases that are associated with edema and present to clinics/institutes where limited surgical facilities are available.

Key words: Conservative management, manual digital reduction, prolapse, rectum

Introduction

Rectal prolapse is defined as the protrusion of the rectal wall completely or partially a full-thickness, complete, irreducible rectal prolapse is a debilitating condition that often leads to bleeding, fecal incontinence, obstructed defecation and pelvic floor dysfunction [1-3]. It not only lowers the quality of life of the patient, but also causes social embarrassment. When identified, laparoscopic surgery should be considered for a safe and definitive treatment [4]. We herein report a case of a 35-year-old male form rural India who presented with retention of urine and complete edematous, inflamed prolapse of the rectum. From our case study, we wish to highlight the role of nonsurgical/conservative conventional methods of management of such severe cases that are associated with edema, especially at places/institutes where limited surgical facilities are available.

Case Report

A 35-year-old male presented to our emergency room (ER) with acute retention of urine since a day. His recent medical history was significant for constipation 8 days earlier to his initial presentation (day 0), which was followed by rectal prolapse a day after (day 1). Due to social stigma and embarrassment, patient successfully reduced the prolapse manually; however, 3 days later (day 4), what followed was a complete, nonreducible prolapse of the rectum [Figure 1] and he additionally developed urinary retention on day 7 (24 h prior

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to his initial presentation to the ER). His personal and family history was noncontributory with no similar presentations earlier in his life. His medical and surgical history was unremarkable. His dietary habits were healthy with an adequate amount of dietary fibers.

Patient was grossly anemic, afebrile with stable vitals. Abdomen was distended and tender. Digital rectal examination revealed complete, painful, edematous, inflamed rectum with complete prolapse [Figure 1a]. Systemic examination was unremarkable. Hemogram was remarkable for reduced hemoglobin count (5.2 g/dL). Other laboratory investigations, including liver and kidney function tests, serum electrolytes, arterial blood gas analysis, were within normal limits. Chest roentgenogram and two-dimensional echo was unremarkable. Ultrasound of the abdomen was remarkable for distension of the bladder. Urinary catheterization to drain the urine was performed immediately. Subsequently, patient was taken to the emergency operating room. In spite of numerous attempts to reduce the prolapse rectum under general anesthesia, the reduction was unsuccessful. The prolapse part was again carefully examined and having no evidence of gangrene and ulceration, a decision for conservative management was taken. As a result, patient received intravenous crystalloid fluids, antibiotics and antiinflammatory drugs along with four pints of blood. Patient was strictly advised to be without any oral feeds until improvement of his condition/ or unless specified by the surgeon and was kept in a head low position. Locally, we applied granulated sugar to the prolapse rectum for 15 min and then attempted to reduce the prolapse again. This treatment was given for 7 days, subsequent to which the inflammation and edema of the rectum reduced. On 8th day of admission, the rectum was reduced and to avoid recurrence, owing to the laxity of the pelvic floor, anal encirclement (Thiersch) was performed under general anesthesia. Subsequently, anal sphincter and pelvic floor exercises were initiated by the physiotherapist. Patient responded well to treatment with no recurrence during the 1st year of follow-up [Figure 1b].

Discussion

Our case demonstrates a severe prolapse of the rectum in a middle-aged man. Our patient refrained to seek medical help immediately due to sheer embarrassment as posed by the condition. Even though, laparoscopic ventral rectopexy has been proven to be safe and effective in the treatment of rectal prolapse [5], we chose the conservative path following exclusion of any gangrenous changes owing to the marked edema and prolapse of the rectum and lack of laparoscopic facilities at our rural institute. Our case highlights the importance of conventional management as followed by us which helped improve the patient's condition a week after his initial presentation. The application of sugar, as suggested by Myers and Rothenberger [6] reduced the edema, following which manual digital reduction was achieved. To maintain the reduction, anal encirclement (Thiersch) was performed. Moreover, there was no recurrence observed in our patient until 1-year of follow-up, after which we lost the patient for further follow-ups.

Rectal prolapse is known to be more common in the elderly with an estimated male to female ratio of 1:6 [7]. It uncommonly involves the pediatric age group, with equal sex predisposition and especially affects children of <3 years of age [8,9]. Constipation, bowel dysfunction, fecal incontinence due to continuous stimulation of the recto anal inhibitory reflex by the prolapsing tissue, and rectal ulceration are commonly associated with it [1-3]. While careful clinical examination of the rectum is pertinent for its diagnosis, a proctoscopy could be used to exclude other pathologies. It is critical to differentiate rectal prolapse from hemorrhoids, intussusception, proctitis, and rectal polyp [10]. The prognosis of rectal prolapse is usually good; however, an untreated prolapse can lead to incarceration and strangulation, rectal bleed, ulceration, and incontinence. While colonoscopy or barium enema may aid to exclude any malignant



Figure 1 (a) Complete, irreducible and edematous prolapse of the rectum (b) reduction achieved following manual digital method after conservative approach using local sugar application

growth that might be serving as the lead point for prolapse, anal manometry and electromyography help evaluate sphincter function to choose the appropriate corrective procedure [11].

Conclusion

Medical professionals/surgeons practicing in developed/ underdeveloped countries or rural areas, where limited advanced surgical facilities are available, should employ conservative methods for management of similar cases of massive, irreducible out pouching of the rectum in order to relieve the patient from the agony caused by this condition.

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Authors' Contributions

MHS, BS and KS participated in the clinical diagnosis and management of the patient. KS, SS and MHS participated in the sequence alignment, literature review, drafting the manuscript and made useful contributions in revising the paper. AS and SK contributed to data gathering. All authors have read and approved the final manuscript.

Consen

The authors' certify that written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the editor-in-chief of this journal.

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Competing Interests

The authors declare that they have no competing interests.

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