

Complete rectal prolapse, which contained small bowel loop, in 34years old, male patient: A Case Report

Ryadh Hakami, Naif Hakami, Anjoom, abdo ayoup, Moh'd faqeahi, Moh'd Zalah, Khalid shebily, abdo obeery, ibithal

Abstract— 34 years old male patient, not known to have any medical illness before, presented to ER of Princes Mohamed Bin Nasser Hospital, with complaint of huge mass protruding through anus since 5 hours prior to presentation, the diagnosis of irreducible complete rectal prolapse has been made. Altemeir (Trans anal proctosigmoidectomy) done, and post operative course passed smoothly without any complications.

Index Terms— rectal prolapse, complete rectal prolapse, complete rectal prolapse with small bowel evacuation, altemeir procedure.

INTRODUCTION

Rectal prolapse is an intussusception of the rectum through the anus with a leading point about 5-7cm above anal verge. It varies from complete rectal prolapse (full thickness) to mucosal prolapse (partial thickness). It usually appear after seven decade with female predominance F: M (6-1).

Rectal prolapse refers to a circumferential, full-thickness protrusion of the rectum through the anus and has also been called "first-degree" prolapse, "complete" prolapse, or procidentia. Internal prolapse occurs when the rectal wall intussuscepts but does not protrude and it is probably more accurately described as internal intussusception. Mucosal prolapse is a partial-thickness protrusion often associated with hemorrhoidal disease and it is usually treated with banding or hemorrhoidectomy.

In adults, this condition is far more common among women, with a female-to-male ratio of 6:1. Prolapse becomes more prevalent with age in women and peaks in the seventh decade of life. It is rare in males and it is associated with weak pelvic and anal musculature. Rectal prolapse is an anatomical abnormality and mostly requires surgical correction.

CASE REPORT

34 years old, Saudi male, married, not known to have any medical illness. He brought by family to ER of prince Mohammad Bin Nasser Hospital with huge mass protruding through anus for 5 hours prior to presentation, about 6:00pm and He came at 11:00pm. He mentioned this problem was starting since 7 years when he noticed small mass passed through anus after defecation, first it reduced spontaneously then in last 1 year, it reduced manually by hand. Therefore, in last 3 days, he was complaining of constipation of stool and flatus (obstipation).

On General examination: BP: 90/60, pulse: 110, temp: 36.4 RR: 23. Abdominal examination: soft, lax, no organomegaly except mild tenderness in lower abdomen. Pre-rectal examination revealed huge mass prolapsed through anus; it was congested, oedematous, with multiple laceration (mucosal breakdown) (Figure 1).

A multiple trial of gentle manual reduction has been done under analgesia and sedation, it was difficult and irreducible. The diagnosis of irreducible complete rectal prolapsed has been made. The situation and procedure discussed with patient and family in details with possibility of stoma, informed consent taken and he taken to theatre immediately after full preparation, it is about 1:00am.

Inside operation room, under general anaesthesia, and area draped, a trial of reduction done again and failed, then proceed for procedure, and the surgeon chose ALTEMEIRE (Trans-anal proctosigmoidectomy) (figure 2). The prolapsed part it was contained loop of small bowel (figure 3), reduced inside and complete resection of rectum with sigmoid with coloanal anastomosis. Patient shifted to surgical ward and he covered by antibiotic and strong analgesia, postoperative course passed smoothly and patient discharge at 4th day. With follow up next week.

DISCUSSION

There is still some debate about the exact pathophysiologic mechanism of RP. The prevailing theories are those of sliding herniation and progressive internal intussusception. The most usual form of RP is the chronic course of the disorder, incarcerated or strangulated RP is a rare scenario, where urgent surgical treatment becomes a priority [1]. Anal manometry, anal ultrasound, defecography, anal electromyography, pudendal nerve terminal motor latency test, sigmoidoscopy, colonoscopy and magnetic resonance imaging are tests used in

evaluation of rectal prolapse. Initially there is a conservative management for rectal prolapse with stool softeners or laxatives and avoidance of prolonged straining. These conservative methods allow reduction of the prolapsed rectum. Oedema can be reduced by the application of sugar, by the injection of Hyaluronidase, or by applying an elastic compression wrap [2-4]

A wide spectrum of operative procedures are available mainly for elective cases [5]. They are categorized as resective, fixative or a combination of both in order to achieve 2 goals: anatomical repositioning of the bowel and improvement of the function of the anorectal complex. The approach may be either abdominal or perineal. Abdominal approaches are performed in patients fit enough to tolerate laparotomy as these seem to result in lower recurrence rates [6], perhaps with the exception of young men who cannot afford the increased risk of impotence and infertility from an abdominal operation[7]. In elective cases, rectopexy, using fixing material (mesh, sutures, clips), is the most popular operation with good results concerning recurrence [8,9]. In the modern era of surgery, the above operations can be accomplished laparoscopically with minimal morbidity and mortality [10].

When the prolapsed bowel is incarcerated or strangulated and cannot return to its anatomic position, an urgent surgical intervention is always indicated. The operation of choice is perineal proctosigmoidectomy with or without colostomy [11-12].

Perianal approach as we used in this case perianal proctosigmoidectomy (Altmaier), it is the best option in case of emergency incarceration or elderly patient. [13-14]

CONCLUSION

There are many surgical procedures for rectal prolapse, so the big challenge is which procedure should be selected because of the precise aetiology and treatment strategy have not been clearly established. If the best procedure is to be selected and favourable outcomes achieved, careful considerations of patient's information and surgeon's clinical experience are required.

Unlike surgery for malignancy, the functional aspects, such as quality of life and defecation should be considered carefully in surgery for rectal prolapse. Attention should be paid to multi-dimensional patient care, as well as surgical techniques. Particularly, female patient with rectal prolapse may have a uterine prolapse or a bladder prolapse; thus, a multidisciplinary team approach may also become important. For the best results, a considered plan prior to surgery, optimal surgery by an experienced hand and careful patient care are important.

FIGURES

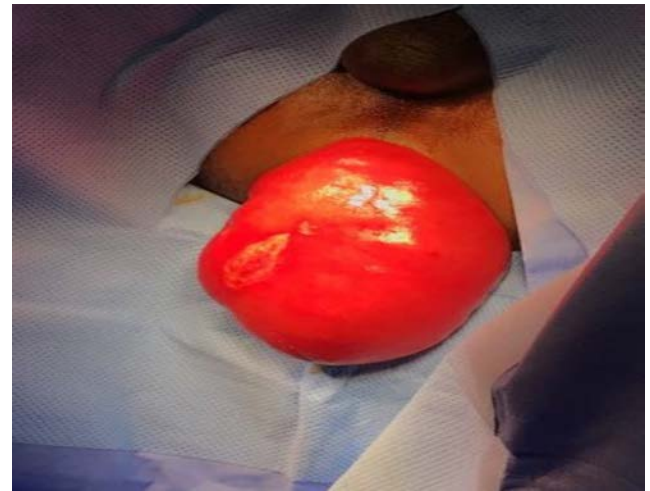


Figure 1: Photo shows a huge mass protruding through anus with mucosal laceration.



Figure 2: photo show removed part of rectum with sigmoid.



Figure 3: Photo shows multiple hemorrhagic spots with fecal material.

REFERENCES

- [1] Ramanujam PS, Venkatesh KS. Management of acute incarcerated rectal prolapse. *Dis Colon Rectum*. 1992; 35: 1154-1156.
- [2] Seenivasagam T, Gerald H, Ghassan N, Vivek T, Bedi AS, Suneet S. Irreducible rectal prolapse: emergency surgical management of eight cases and a review of the literature. *Med J Malaysia* 2011 Jun;66(2):105-7.
- [3] Coburn WM 3rd, Russell MA, Hofstetter WL. Sucrose as an aid to manual reduction of incarcerated rectal prolapse. *Ann Emerg Med* 1997 Sep;30(3):347-9.
- [4] Chaudhuri A . Hyaluronidase in the reduction of incarcerated rectal prolapse: a novel use. *Int J Colorectal Dis* 1999 Nov;14(4-5):264.
- [3] Kuijpers HC. Treatment of complete rectal prolapse: to narrow, to wrap, to suspend, to fix, to encircle, to plicate or to resect? *World J Surg*. 1992; 16: 826-830. [3] Madiba TE, Baig MK, Wexner SD. Surgical management of rectal prolapse. *Arch Surg*. 2005; 140: 6373.
- [5] Bastawrous A, Abcarian H. Complete rectal prolapse. In: Dempsey DT, Klein AS, Pemberton JH, Peters JH, editors. *Suckelford's Surgery of the alimentary tract*. Volume 2. 6th edition. Philadelphia: Saunders Elsevier; 2007. pp. 1958-1965.
- [6] Tjandra JJ, Fazio VW, Church JM, Milsom JW, Oakley JR, Lavery IC. Ripstein procedure is an effective treatment for rectal prolapse without constipation. *Dis Colon Rectum*. 1993; 36: 501-507.
- [7] McCue JL, Thomson JP. Clinical and functional results of abdominal rectopexy for complete rectal prolapse. *Br J Surg*. 1991; 78: 921-923. [
- 8] Solomon MJ, Young CJ, Evers AA, Roberts RA. Randomized clinical trial of laparoscopic versus open abdominal rectopexy for rectal prolapse. *Br J Surg*. 2002; 89: 35-39.
- [9] Habr-Gama A, Jacob CE, Perez RO, Proscurshim I. Rectal prolapse: Perineal approach. In: Fischer JE, Bland KI, editors. *Mastery of Surgery*. Volume 2. 5th edition. Philadelphia: Lippincott Williams and Wilkins; 2007. pp. 1591-1599.
- [10] Miles WE. Rectosigmoidectomy as a method of treatment for procidentia recti. *Proc R Soc Med*. 1933; 26: 1445-1452
- [11] Altemeier WA, Culbertson WR, Schwengerdt C, et al. Nineteen years' experience with the one stage perineal repair of rectal prolapse. *Ann Surg*. 1971;173:993-1006
- [12] Ramanujam PS, Venkatesh KS, Fietz MJ. Perineal excision of rectal procidentia in elderly high-risk patients. A ten-year experience. *Dis Colon Rectum*. 1994; 37: 1027-1030.
- [13] Brown AJ, Anderson JH, McKee RF, Finlay IG. Strategy for selection of type of operation for rectal prolapse based on clinical criteria. *Dis Colon Rectum* 2004 Jan;47(1):103-7.
- [14] Fang SH, Cromwell JW, Wilkins KB, Eisenstat TE, Notaro JR, Alva S. Is the abdominal repair of rectal prolapse safer than perineal repair in the highest risk patients? An NSQIP analysis. *Dis Colon Rectum* 2012 Nov ;55(11):1167-72.