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Altemeier Rectosigmoidectomy for Strangulated Rectal Prolapse

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ABSTRACT

A 70 year old gentleman presented in the emergency department of Tribhuvan University Teaching Hospital, Kathmandu, Nepal with strangulated complete rectal prolapse. After complete evaluation and necessary investigations, patient underwent Altemeier perineal rectosigmoidectomy and had an uneventful recovery. This case report tries to highlight the importance of Altemeier procedure as the only option for managing rectal prolapse when patients present with incarceration or strangulation of the prolapsed rectum with very good outcome.

Keywords: altemeier, perineal, rectal prolapse, rectosigmoidectomy, strangulation.

INTRODUCTION

Complete rectal prolapse is a full thickness protrusion of rectum through the anal sphincter mechanism and is very distressing condition to the patients. Incarceration and strangulation of rectal prolapse is a rather unusual entity.[1] We present a case report of 70 year old male patient presented with strangulated rectal prolapse and managed successfully with perineal proctosigmoidectomy (Altemeier's procedure).

CASE REPORT

A 70 year old male patient presented in the emergency with inability to reduce the rectal prolapse for around 18 hour's duration. He had been having rectal prolapse for more than five years duration and he used to reduce it manually. Despite his frequent successful attempts in the past to replace the prolapsed rectum, he couldn't manage to do it this time. He then gradually noticed that the prolapse part was becoming increasingly swollen and slowly started having pain which was increasing too. Patient didn't have vomiting or abdominal distension. He was passing flatus. Patient didn't bother to visit hospital until he had severe intolerable perianal pain and noticed his fingers stained with some blood. Not to our surprise, he never shared his problem to any of his relatives and neither had he visited to any doctors. If he would have been successful this time too, he would have never come to the hospital for this problem. Our patient was illiterate but otherwise he had remained in good health. He didn't have any other major significant past medical or surgical history. On examination, patient was well oriented, febrile and had tachycardia but otherwise with stable vitals. Abdominal examination didn't reveal any evidence of obstruction or features of peritonitis. Other Systems examination was grossly intact. Local perianal examination revealed prolapsed part of rectum around 12cm in length from verge, grossly edematous with features of strangulation (Figure 1). There was occasional bleeding from the surface probably due to prolonged congestion of the prolapsed segment. Without further delay, as there were no options, patient was prepared for emergency perineal rectosigmoidectomy with posterior levatorplasty and underwent successful procedure (Figure 2). The perioperative period went uneventful and our patient was discharged on seventh postoperative day when he was fully tolerating oral diets and normal bowel movements. On follow up at one month, he had been doing well and was very satisfied except that he complained of mildanal incontinence.

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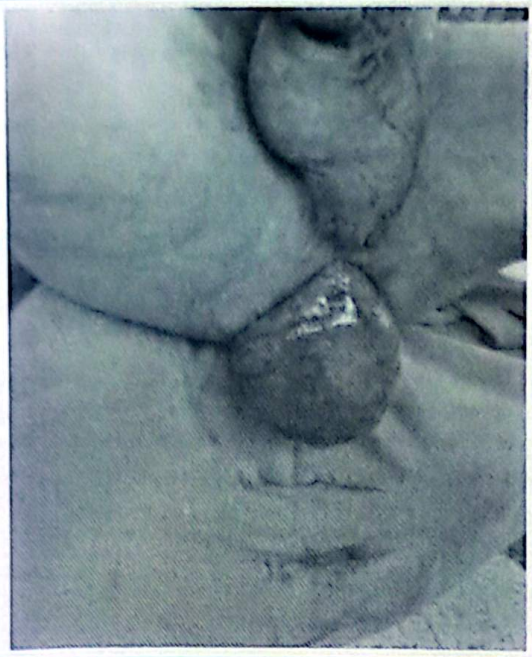

Figure 1. Strangulated complete rectal prolapse.

Figure 2. Procedure in progress.

Complete rectal prolapse is a distressing condition that represents full thickness protrusion of rectum through the anal sphincter mechanism. Incarceration and strangulation of rectal prolapse is a rather unusual entity observed in elderly female patients and represents a surgical emergency.[1] Usually, uncomplicated rectal prolapse can be manually reduced but when it doesn't, few techniques may help the bowel return to its anatomic position. Sedation, Tredelenberg position topical applications of salt and sucrose may decrease edema and enable reduction.[2,3] However, when the prolapsed bowel is incarcerated and strangulated, it represents a surgical emergency and as the only option for strangulated rectal prolapse, perineal rectosigmoidectomy is performed.[4] Goligher mentions that among the few indications for perineal rectosigmoidectomy, irreducibility with gangrene remains one of them.[5]

Perineal rectosigmoidectomy was first advocated by miles in 1933 and was subsequently by Altemeier et al in 1971.[6] The procedure involves full thickness excision of rectum and, if possible portion of sigmoid colon. The reported overall mortality rate ranged from 0- 5% and recurrence rates from 0- 16%.[6] Some authors have suggested addition of posterior levatorplasty as this creates the anorectal angle, which seems to improve anal incontinence.[7] Perineal rectosigmoidectomy best suited for patients with incarcerated, strangulated or even gangrenous prolapsed rectal segment and patients who had recurrence after another transperineal repair.[6] Abdominal procedure cannot be used in these situations, even in fit patients.Furthermore, in recent years, there has been a trend towards offering elective perineal rectosigmoidectomy in health younger patients specially males.[8] The abdominal approaches carry an increased risk of impotence and infertility when comparing to the perineal ones.[2]

Rectal prolapse is not an unusual condition in Nepalese population. However, till date, there are no published evidences regarding the true incidence and management of this condition in the country. Our hospital, Tribhuvan University Teaching Hospital is one of the largest tertiary level care hospitals in Nepal. We presented our retrospective data on cases of rectal prolapse on National conference of society of Surgeons Nepal 2009 which showed that the disease involves almost all age groups although fairly common in elderly women.[9] It is not uncommon to see patients with rectal prolapse to have their disease for years; some even had their rectal prolapse for more than ten years. Due to low level of understanding about the condition they don't share their problem to the relatives and are hesitant to come to hospitals. So they keep their disease undiagnosed for years. However it's very uncommon to see strangulated rectal prolapse. Majority of the times when patient come with irreducibility, usually gentle manual reduction, under sedation sometimes, is successful. This is the first reported case in our hospital which required perineal rectosigmoidectomy as an emergency procedure.

In conclusion, strangulated rectal prolapse requiring emergency surgery is an uncommon condition and among various techniques, Altemeier rectosigmoidectomy is the most acceptable procedure dealing with this condition.

REFERENCES

1. Berney CR. Complicated incarcerated rectal prolapse: a surgical challenge in an elderly patient on antiplatelet agents. Australasian Medical Journal AMJ 2010;3:691- 93.
2. Bastawrous A, Abcarian H. Complete rectal prolapse. In: Dempsey DT, Klein AS, Pemberton JH, Peters JH, editors. Shackelford's Surgery of the alimentary tract. Volume 2. 6th edition. Philadelphia: Saunders Elsevier, 2007:1958- 65.
3. Coburn WM, Russell MA, Hofstetter WL. Sucrose as an aid to manual reduction of incarcerated rectal prolapse. Ann Emerg Med. 1997;30:347- 49.
4. Habr-Gama A, Jacob CE, Perez RO. Rectal Prolapse: Perineal approach. In: Fischer JE, Bland KI, Editors. Mastery of Surgery. Volume 2. 5th edition. Philadelphia: Lippincott Williams and Wilkins, 2007: 1591- 99.
5. Goligher JC. Surgery of the anus, rectum and colon. 5th ed. London: Bailliere Tindall, 1984: 302.
6. Madiba TE, Baig MK, Wexner SD. Surgical management of rectal prolapse. Arch Surg. 2005;140:63-73.
7. Ramanujam PS, Vankatesh KS, Fietz MJ. Perineal excision of rectal procidentia in elderly high risk patients. A ten- year experience. Dis Colon Rectum. 1994;37:1027-30.
8. Azimuddin K, Khubchandani IT, Rosen L. Rectal prolapse: a search for the best operation. Am Surg. 2001;67:622-7.
9. Bhandari RS, Singh KP. Rectal Prolapse: single disease multiple options. A retrospective study of cases of rectal prolapse managed at Tribhuvan University Teaching Hospital, Kathmandu, Nepal: presented as free paper at 6th national conference of society of surgeons of Nepal, Dec 4- 5, Bharatpur, Nepal.