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Case Report

Transanal Evisceration in Rectal Perforation: Typical Presentation of a Rare Condition

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ABSTRACT

Transanal evisceration resulting from rectal perforation is a rare but potentially fatal event, if not treated promptly. We describe the case of an elderly woman for which the history of rectal prolapse played a major role in the etiopathogenesis of the event, undoubtedly. A surgical resection of the rectum was performed, with good results and without complications. Early recognition of this condition is necessary in order to treat it promptly with a surgical operation and lower morbidity and mortality rates.

Introduction

Rectal perforation with consequent transanal evisceration of the small bowel is a rare, but severe condition. Since the first case described by Brodie in 1827, few other cases have been described in the literature [1]. It represents a dramatic event with generally spontaneous onset and unclear pathogenesis, in which a chronic ischaemic insult to the rectal wall, resulting in thinning and subsequent perforation leads to transanal evisceration. Promptly surgical intervention, consisting of primary suture repair of the rectal tear or a Hartmann's procedure is essential to minimize patient morbidity and mortality.

Case Presentation

We present the case of a 65-year-old woman who was admitted to our Emergency Department with mild lower abdominal pain and transanal prolapse of the bowel. She was haemodynamically stable (blood pressure 160/60 mmHg; heart rate 86 bpm; respiratory rate 20/min). She had history of HCV infection, peripheral neuropathy and rectal prolapse. On examination, there was almost all the bowel protruding through the anus and the loops were oedematous and hypoperfused (Figure 1). Blood test revealed Hb 13.4 g/dL and WBC 12.1 × 10^9/L. At urgent laparotomy there was a fecal peritonitis. All the bowel was retracted through the anus and it was vital with no signs of ischaemia or perforation. Nevertheless, there was a large laceration of the intraperitoneal anterior rectal wall. Therefore, the operation was completed with rectal resection and Hartmann's procedure with terminal colostomy. Open abdomen with negative pressure therapy (OA-NPT) was applied for 7 days because of the severe contamination. Abdomen definitive closure was achieved on post-operative day 8. The remaining course was uneventful. The patient was treated with broad spectrum intravenous antibiotics and discharged home on post-operative day 16.

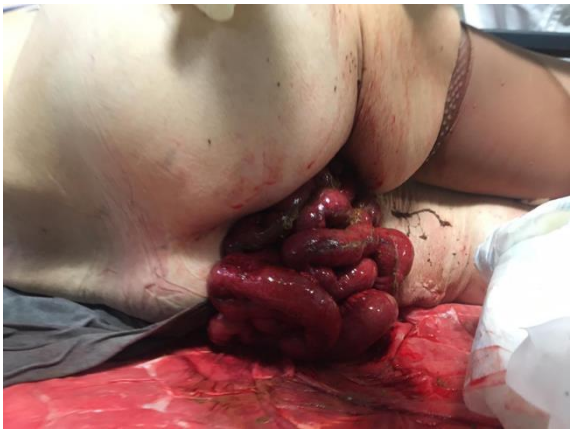

Figure 1: The figure shows the oedematous and dusky eviscerated bowel loops.

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Discussion

Rectal rapture with bowel evisceration is an uncommon surgical emergency with less than 100 cases in literature [2]. It is usually associated with long history of rectal prolapse, representative of the main recognized risk factor for this disease [3, 4]. Some studies describe this as a sliding hernia with the pouch of Douglas as sac. According to this theory, the Douglas pressure on the rectum make it weaker because of frequent ischaemic episodes [5]. In fact, histology of the rectum showed chronic inflammatory and ischaemic changes around the perforation site in almost 50% of patients. Other factors associated with a higher incidence of this event are mostly represented by history of constipation, iatrogenic causes or closed or penetrating trauma [6-10]. The coexistence of gynaecological pathologies or simply female sex were also more commonly found in these patients. However, a trigger is not always recognized [11, 12]. In our case, history of rectal prolapse certainly favoured the onset of transanal evisceration. Early surgical treatment with resuscitation and urgent operation resulted in a favourable outcome for the patient, avoiding nefarious consequences.

Statements and Declarations

The corresponding author declares that he acts on behalf of all authors and that all authors have approved the submission.

Data Availability

Information was obtained consulting clinical records but are available from the corresponding author on reasonable request.

Conflicts of Interest

None.

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None.

Consent

Informed consent was obtained from the patient.

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Ethical Considerations

The study was based on hospital data obtained consulting clinical records, therefore ethical disclosure was not necessary.

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Not necessary.

REFERENCES

1. Morris AM, Setty SP, Standage BA, Hansen PD (2003) Acute transanal evisceration of the small bowel: report of a case and review of the literature. *Dis Colon Rectum* 46: 1280-1283. [Crossref]
2. Hajiev S, Ezzat A, Sivarajah V, Reese G, El-Masry N (2021) Transanal evisceration of small bowel in two patients with chronic rectal prolapse: case presentation and literature review. *Ann R Coll Surg Engl* 103: e29-e34. [Crossref]
3. Cecilia M, Barambio J, Escanciano M, Soares GS, Lopez OM et al. (2022) Rectal Prolapse and Spontaneous Perforation Causing Transanal Evisceration of the Small Bowel: A Case Report. Clinical History May Predict this Condition. *Ann Case Report* 7: 875.
4. Kornaropoulos M, Makris MC, Yettimis E, Zevlas A (2016) Transanal evisceration of the small bowel a rare complication of rectal prolapse. *Int J Surg Case Rep* 19: 38-40. [Crossref]
5. Furuya Y, Yasuhara H, Naka S, Yamazaki K, Yanagie H et al. (2008) Intestinal evisceration through the anus caused by fragile rectal wall. *Int J Colorectal Dis* 23 :721-722. [Crossref]
6. Lasheen O (2021) Spontaneous trans-anal evisceration of small bowel: a case report. *J Surg Case Rep* 18: rjaa582. [Crossref]
7. Hovey MA, Metcalf AM (1997) Incarcerated rectal prolapse--rupture and ileal evisceration after failed reduction: report of a case. *Dis Colon Rectum* 40: 1254-1257. [Crossref]
8. Narayana Swamy Chetty YV, Sridhar M, and Pankaja SS (2014) Transanal evisceration of small bowel-a rare surgical emergency. *J Clin Diagn Res* 8: 183-184. [Crossref]
9. Rechner P, Cogbill TH (2001) Transanal small bowel evisceration from abdominal crush injury: case report and review of the literature. *J Trauma* 50: 934-936. [Crossref]
10. Vincenzi R, Cruz RJ Jr (2008) Transanal Small Bowel Evisceration: An Unusual Presentation of Rectal Impalement. *Eur J Trauma Emerg Surg* 34: 606. [Crossref]
11. Pal AK, Kumar P, Yadav D, Kumar A, Pahwa HS et al. (2022) Spontaneous Rectal Perforation with Transanal Evisceration of the Small Bowel: A Rare Case Report. *J Acute Care Surg* 12: 74-76.
12. Walton SJ, Gobara O, Brown K (2013) Spontaneous transanal evisceration. *Ann R Coll Surg Engl* 95: 120-121. [Crossref]