

Post-Traumatic Evisceration of the Sigmoid Colon in A Child: A Case Report

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Abstract

Case Report

Background: Abdominal trauma is a frequent cause of pediatric emergency admissions, but traumatic evisceration is exceptionally rare. It is defined as the protrusion of intra-abdominal organs through a defect in the abdominal wall. In children, the elasticity of the abdominal wall usually provides protection, which explains the rarity of this presentation.

Case presentation: We report the case of an 11-year-old boy with no significant past medical history who sustained a road traffic accident with violent crushing trauma. On admission, clinical examination revealed a 10 cm abdominal wall laceration extending from the left iliac fossa to the hypogastrium, with evisceration of viable sigmoid colon and several small bowel loops. Multiple superficial abrasions were also noted on the trunk. The patient was hemodynamically stabilized after initial resuscitation. Emergency laparotomy confirmed the absence of intestinal perforation or associated intra-abdominal lesions. The surgical procedure included reduction of the eviscerated bowel, abundant peritoneal lavage, and placement of a drain. Broad-spectrum antibiotics were administered. The postoperative course was uneventful, with bowel function recovery on postoperative day 2 and hospital discharge on day 7. At one-month follow-up, the patient was asymptomatic with satisfactory wound healing. **Conclusion:** Post-traumatic evisceration in children is an exceptional but severe surgical emergency. Its management requires prompt resuscitation, early laparotomy, and careful abdominal wall repair. Long-term follow-up is necessary to assess both functional and cosmetic outcomes.

Keywords: Pediatric trauma; Blunt abdominal trauma; Evisceration; Sigmoid colon.

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INTRODUCTION

Pediatric abdominal trauma is a common cause of emergency admission, but post-traumatic evisceration remains an extremely rare condition. It is defined as the protrusion of intra-abdominal organs through a defect in the abdominal wall. In children, the elasticity of the abdominal wall generally provides protection, which explains the rarity of such cases.

The occurrence of evisceration reflects the severity of the trauma and mandates urgent surgical management to prevent ischemia, infection, and mortality. We present the case of an 11-year-old boy with sigmoid colon and small bowel evisceration following a road traffic accident and discuss the diagnostic and therapeutic considerations.

CASE PRESENTATION

An 11-year-old boy, with no relevant medical history, was admitted following a road traffic accident involving violent crushing trauma. On initial assessment, the following findings were noted:

- Evisceration of the sigmoid colon (Figure 1) and several viable small bowel loops through a 10 cm abdominal wall laceration extending from the left iliac fossa to the hypogastrium.
- Multiple superficial abrasions on the trunk.
- Hemodynamic stabilization achieved after initial resuscitation.

An emergency laparotomy was performed. Intraoperative exploration confirmed the integrity of the gastrointestinal tract with no intestinal perforation or associated intra-abdominal injuries. Surgical

management consisted of reduction of the eviscerated bowel, abundant peritoneal lavage, and abdominal wall repair with drainage (Figure 2).

Broad-spectrum antibiotics were administered. Postoperative recovery was favorable, with restoration of

bowel transit on postoperative day 2 and hospital discharge on day 7. At one-month follow-up, the patient was asymptomatic and presented with satisfactory wound healing.



Figure 1: Traumatic abdominal wall laceration with evisceration of sigmoid colon and small bowel



Figure 2: Postoperative abdominal wall repair (with drain in place)

DISCUSSION

Abdominal wall injuries following blunt trauma are relatively uncommon, with an estimated incidence of 9% [1]. Traumatic evisceration secondary to blunt trauma is exceptional, with only a few cases reported in the literature, particularly following road traffic accidents [2].

Clinically, evisceration is an obvious finding, usually diagnosed immediately upon examination. It can occur through natural orifices such as the anus [3], vagina, or diaphragm, but also through anatomically weak areas of the abdominal wall, including the lateral

border of the rectus muscle, the infraumbilical region lacking posterior sheath, or the inguinal canal [4]. In hemodynamically stable patients, associated intra-abdominal injuries must be ruled out, ideally with abdominal CT scan, as their incidence may reach 30% [5].

Various mechanisms have been reported in the literature: perianal [6] or transanal eviscerations [3,8] following crush injuries or pool suction accidents, transvaginal eviscerations after a water slide injury [4], and more atypical cases such as evisceration complicating a full-thickness abdominal burn over a pre-

existing paraumbilical hernia [5], or mountain bike accidents complicated by pancreatic transection [7].

Management relies on emergency laparotomy with visceral reduction and careful abdominal wall repair [8]. As with other types of eviscerations, treatment should include prompt resuscitation, exclusion of visceral injuries, and early surgical exploration.

Long-term follow-up is recommended to evaluate both functional and cosmetic outcomes, which are particularly important in pediatric patients.

CONCLUSION

Post-traumatic evisceration in children is a rare but serious surgical emergency. Diagnosis is clinical, and management requires rapid resuscitation, urgent laparotomy, and meticulous abdominal wall repair. Long-term follow-up is essential to assess functional recovery and cosmetic results.

REFERENCES

1. Dennis RW, Marshall A, Deshmukh H, Bender JS, Kulvatunyou N, Lees JS, et al. Abdominal wall injuries occurring after blunt trauma: incidence and grading system. *Am J Surg*. 2009 ;197(3):413-7.
2. van As AB, Rode H. Evisceration through multiple abdominal wall defects following blunt abdominal injury. *Pediatr Emerg Care*. 2003 ;19(5):353-4.
3. Rechner P, Cogbill TH. Transanal small bowel evisceration from abdominal crush injury: case report and review of the literature. *J Trauma*. 2001 ;50(5):934-6.
4. Avidor Y, Rub R, Kluger Y. Vaginal evisceration resulting from a water-slide injury. *J Trauma*. 1998 ;44(2):415-6.
5. Alfaro M, Amoury RA. Intestinal evisceration complicating a burn of the abdominal wall. *J Pediatr Surg*. 1973 ;8(6):951-2.
6. Gomez-Juarez M, Cascales P, Garcia-Olmo D, Gomez-Juarez F, Usero S, Capilla P, et al. Complete evisceration of the small intestine through a perianal wound as a result of suction at a wading pool. *J Trauma*. 2001 ;50(2):398-9.
7. Lovell ME, Brett M, Enion DS. Mountain bike injury to the abdomen, transection of the pancreas and small bowel evisceration. *Injury*. 1992 ;23(7):499-500.
8. Cain WS, Howell CG, Ziegler MM, Finley AJ, Asch MJ, Grant JP. Rectosigmoid perforation and intestinal evisceration from transanal suction. *J Pediatr Surg*. 1983 ;18(1):10-3.