

### INTRODUCTION

Chronic constipation, if left untreated, can lead to fecal impaction which may result in complications such as intestinal obstruction and respiratory failure. We present the case of a young adult who developed respiratory compromise due to long-standing constipation, highlighting the challenges and treatment involved.

### CASE REPORT

A 16-year-old boy with a history of constipation since childhood, intermittently managed with laxatives, presented ED with progressive abdominal distension, abdominal pain, and worsening shortness of breath. He reported no bowel movement for the past two months. On arrival at ED, he showed signs of respiratory distress. Examination revealed a grossly distended abdomen. A DRE revealed impacted stool. Chest and abdominal radiographs demonstrated significant elevation of both hemidiaphragms and a large bowel that was markedly dilated and feces-loaded, consistent with intestinal obstruction. Initial decompression with a Ryle's tube, rectal enemas, and manual evacuation were unsuccessful, and the patient remained in severe respiratory distress. Due to worsening respiratory compromise, he required endotracheal intubation, which was performed using the aortocaval displacement technique. Despite this, ventilation remained difficult due to diaphragmatic splinting from massive bowel distension. The patient was then urgently transferred CT scan, which confirmed the presence of severe colonic dilatation. He subsequently underwent surgical decompression. Following surgery, his respiratory parameters improved significantly.

1. Munro, Alexander M.B., F.R.C.S.1. Respiratory failure in adult Hirschsprung's disease: Report of a case. Diseases of the Colon & Rectum 21(1):p 52-53, January 1978.
2. Lupon, E., Labbe, F., Nini, E. et al. Hirschsprung disease in an adult with intestinal malrotation and volvulus: an exceptional association. J Med Case Reports 13, 124 (2019).

### DISCUSSION

Fecal impaction from chronic constipation can lead to serious complications, including respiratory compromise from mass effect. In this patient, the large fecaloma caused abdominal distension, pushing the diaphragm upward and impairing lung expansion. This resulted in ventilation-perfusion mismatch and respiratory failure. Early recognition and intervention are essential. Before intubation, optimal patient positioning with manual abdominal displacement can enhance venous return, perfusion, and oxygenation.

### CONCLUSION

Correlation between constipation and respiratory compromise is rarely discussed. This rare case emphasizes the need for prompt treatment of constipation, as neglecting it can lead to serious complications. As emergency professionals, our primary focus is on initial stabilization prior to definitive management, thus a clear understanding of the disease's pathophysiology is crucial for improving treatment outcomes.



Figure 1: The degree of abdominal distension

Figure 3: The colonic distension with fecal material intraoperatively



Figure 2: X-rays showed gross distension of large bowel with gas and feces & marked elevation of both hemidiaphragms