PATENT OMPHALOMESENTERIC DUCT CAUSING SMALL BOWEL OBSTRUCTION IN AN 85-YEAR-OLD FEMALE

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Introduction

Omphalomesenteric duct (OMD) anomalies represent one of the most frequent congenital malformations at 2-3% of the general population, the majority comprising of Meckel's diverticulum. In rare instances a fistulous connection from the umbilicus to the terminal ileum forms a patent OMD which can remain asymptomatic until adulthood. There are few published cases of patent OMD presenting as obstruction in adults, ages ranging from 20-45. We describe a highly unusual presentation of small bowel obstruction caused by patent OMD in an elderly female patient, the first such case described to date.

Case Presentation

The patient is an 85-year-old female with no prior abdominal surgical history who presented to the emergency department with three days of abdominal pain and emesis. CT of the abdomen and pelvis demonstrated closed loop bowel obstruction (Figure 1). Laboratory values were significant for hyponatremia, azotemia, and leukocytosis with reactive thrombocytosis. Physical exam revealed peritonitis. A nasogastric tube was placed for decompression and intravenous fluids and piperacillin-tazobactam were started. The patient was recommended to proceed with emergency laparotomy.

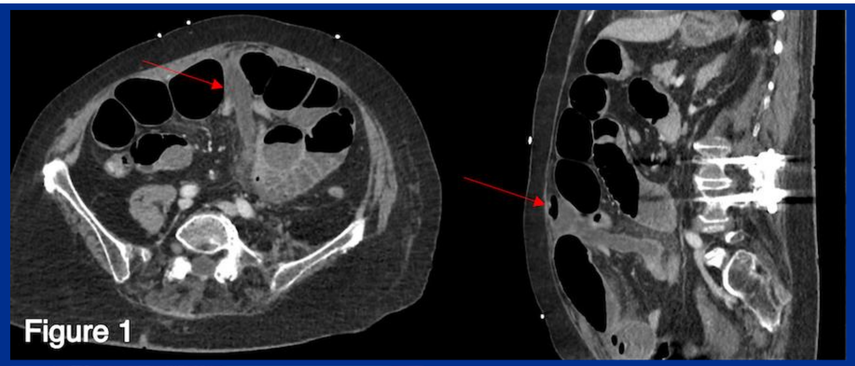
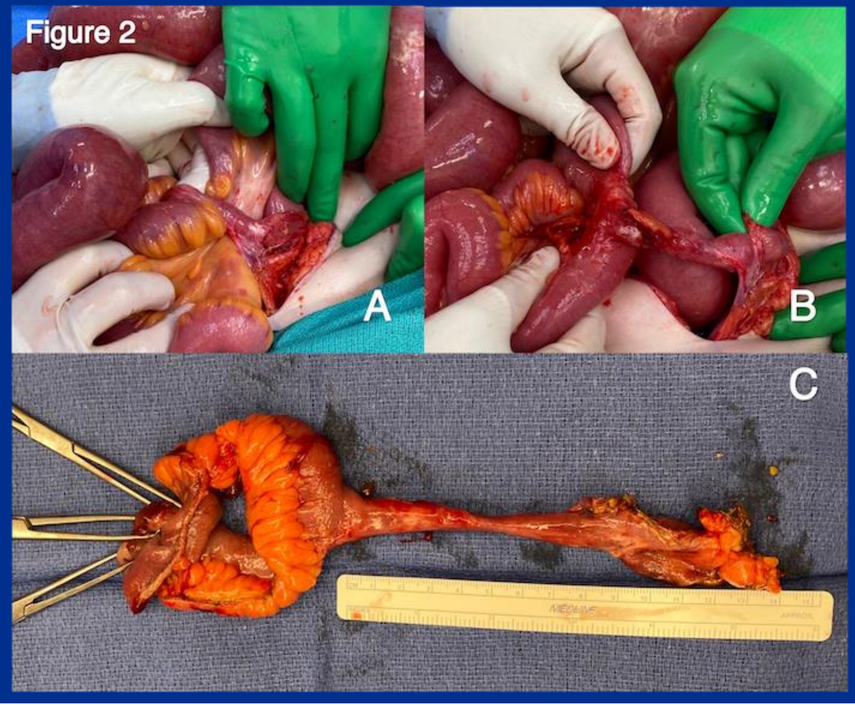


Figure 1



Operative Discussion / Clinical Course

The operation began with a midline laparotomy incision. Exploration revealed a closed loop small bowel obstruction around a persistent OMD. There was evidence of chronic inflammation as demonstrated by a small bowel stricture proximal to the diverticulum and mesenteric scarring (Figure 2A). The closed loop obstruction was untwisted, and the involved segment appeared viable (Figure 2B). A stapled small bowel resection and anastomosis was performed. The specimen was sent for pathology (Figure 2C). The mesenteric defect was closed with a running 3-0 Vicryl suture. The fascia was closed and a suprafascial wound vacuum was placed.

The patient's postoperative course was uncomplicated, and she was discharged to a skilled nursing facility on postoperative day eight after return of bowel function and incremental diet advancement. Intraoperative cultures grew clostridium perfringens requiring a short course of intravenous antibiotics. Pathology of the surgical specimen was consistent with Meckel's diverticulum.

Conclusion

We described a case of small bowel obstruction caused by a persistent OMD in an elderly patient, the oldest documented to date. This case highlights the importance of considering a wide differential in patients presenting with bowel obstruction in a virgin abdomen, especially in the older population. When other causes of obstruction have been eliminated or are of low concern, the differential should expand to include anatomical anomalies such as persistent OMD, or other omphalomesenteric anomalies.