WOUND EVISCERATION FOLLOWING LAPAROTOMY WITH MIDLINE COLOSTOMY

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INTRODUCTION

- Wound evisceration is a rare post-surgical complication with estimated occurrence rates less than 3% and mortality rates as high as 40% in adults.
- Studies have shown that midline incisions are more often associated with evisceration when in conjunction with colostomy creation due to impaired fascial closure and an increased chance of wound infection.
- This case highlights the importance of proper surgical planning and risk stratification for stoma site placement in patients with midline laparotomy incisions as postoperative wound infections have proven to be one of the highest risk factors associated with evisceration.

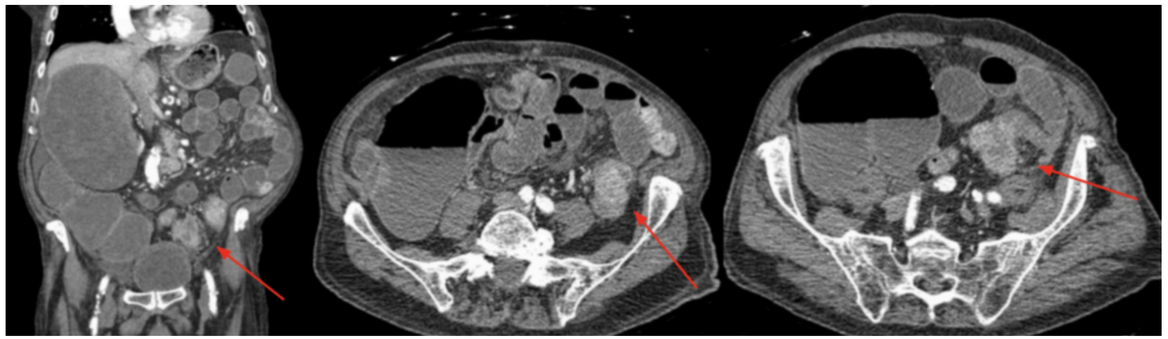
OBJECTIVE

We report a patient who developed wound evisceration following laparotomy with midline colostomy

CASE PRESENTATION

- A 96 year old male with a history of hypertension, non-ST elevation MI, prior hernia repair and previous smoking history presented with abdominal pain, vomiting and constipation for 8 days.
- On exam the patient had diffuse peritonitis. CT abdomen and pelvis revealed a large bowel obstruction with a sigmoid mass versus phlegmon measuring 4.0 x 2.5cm and adjacent inflammatory changes.
- The patient underwent an exploratory laparotomy where he was found to have a colonic obstruction at the level of the sigmoid mass and peritoneal carcinomatosis. A transverse loop colostomy was performed with stoma placement at the superior aspect of the laparotomy incision. He was discharged on postoperative day 3 (POD) with gas and stool output through the colostomy after being evaluated and educated by the wound ostomy nurse.
- He returned to the ED postoperative day 11 with leakage around his colostomy site and was found to have post-operative dehiscence with small bowel evisceration through the midline fascia.

IMAGING



RESULTS

- The patient underwent an additional laparotomy with a left hemicolectomy, takedown of transverse loop colostomy and creation of end colostomy in the right upper quadrant with debridement and closure of the midline incision.
- The patient's hospital course was complicated by prolonged post-operative ileus, but discharged on hospital day 11.

CONCLUSION

- Literature has shown when there is the possibility of an ostomy, curving the midline incision to the opposite side of the umbilicus and placement of non-absorbable internal retention sutures in the fascia every 3-5 cm may improve outcomes.
- In non-emergent cases, pre-operative consultation by an ostomy nurse has also been shown to decrease the risk of evisceration as patient education is crucial in aiding wound healing and avoiding postoperative infections.