CASE REPORT

A RARE CASE REPORT OF IATROGENIC CAECAL PERFORATION

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ABSTRACT: A Caecum perforation is a very rare identity. Traumatic caecal perforations are even rare. Exteriorization of the caecum may be necessary when the duration of the perforation has been prolonged, here in the present case an attempt was made with primary repair with peritoneal lavage and patient recovered uneventfully.

KEYWORDS: Primary repair, cecal perforation.

CASE REPORT: A 72-year-old female patient was referred to department of surgery for generalized abdominal pain of 3 days duration. There was a history of constipation lasting for 3 days. There was no vomiting. Patient had undergone open reduction and internal fixation for right intertrochanteric fracture femur following self-fall six days ago in the orthopedic department. Patient was started on oral diet 6 hours following the surgery and had only complaints of pain at the surgical site. There were no known co-morbidities.

On physical examination, she had tachycardia (pulse rate of 110/ min). Abdomen was distended. There was generalized abdominal tenderness and guarding. Liver dullness was obliterated. The bowel sounds were absent. The haemogram showed leucocytosis (11000/Cu mm). Chest X-ray showed free air under the diaphragm. A preoperative diagnosis of hollow viscus perforation with peritonitis was made and the patient was taken up for emergency laparotomy.

Fig. 1: Intra operative image cecal perforation

On laparotomy, there was caecal perforation with faecal peritonitis. The perforation was 0.2 X 0.2 cm with healthy margins. There were no adhesions and rest of the bowel loops, appendix and liver and spleen were normal.

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The suspicion of iatrogenic trauma due to prior orthopaedic intervention was anticipated and was discussed with the corresponding faculty regarding the same and medial direction of passage of guide wire was recollected.

Fig. 2: Perforation after primary repair

The caecum was decompressed and primary repair of the perforation was performed in two layers. Peritoneal lavage done and pelvic drain was placed. Oral diet was started on post-operative day 5. Drain was removed on post-operative day 6. Patient post-operative recovery was uneventful and was discharged on post-operative day 12.

DISCUSSION: A Caecum perforation is a very rare identity. Traumatic caecal perforations are even rare.¹ Caecal perforations are usually seen associated with entities such as diverticular disease, inflammatory bowel diseases, Ogilvie syndrome,² closed loop obstructions,³ pancreatic carcinomas,⁴ colorectal cancers,⁵ Hirschsprung's disease,⁶ rarely associated with foreign body,^{7,8} in burn patients,⁹ tuberculosis infection¹⁰ and following caesarean section^{11,12} or iatrogenic endoscopic procedure. Traumatic causes of caecal perforations are stab wounds, gunshot wounds, operative wounds and foreign body.¹

Surgery for colonic perforation is associated with high morbidity and mortality rates. Simple closure of the perforation without exteriorizing the caecum was the procedure most used.¹ Exteriorization of the caecum may be necessary when the duration of the perforation has been prolonged, and when fecal contamination is present.¹ These cases require added hospitalization, extra care for their caecostomy, and a second operation to re-place the caecum into the abdomen. Other surgical options are tube caecostomy, and right colectomy.¹

In the present case, as the perforation size was small and margins were healthy, an attempt was made with primary repair even with peritoneal lavage and patient recovered uneventfully.

CONCLUSION: Iatrogenic caecal perforations are very rare and are documented usually following endoscopies. Caecal perforations following orthopaedic procedures have not been documented. Early diagnosis and prompt surgical repair of the perforation is necessary.

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For small perforations, primary repair may be an option with least morbidity thus reducing the morbidity associated with exteriorization or caecostomy.

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