

# A MINIMALLY INVASIVE APPROACH TO CAECAEAL VOLVULUS: A RARE COMPLICATION OF COLONOSCOPY

D.Heath K. Kim A. Jacob

Department of General Surgery, St, John of God Murdoch, Barry Marshall Parade, Murdoch WA

## Introduction

- Cecal volvulus is a rare but potentially serious condition characterized by torsion or twisting of the cecum, leading to bowel obstruction. It is important for clinicians to have a clear understanding of the presenting symptoms to ensure timely diagnosis and appropriate management.
- The combination of clinical presentation and appropriate radiological evaluation is crucial for timely and accurate diagnosis.
- Prompt surgical intervention is often necessary to relieve the obstruction, correct the volvulus, and restore bowel viability. The management of caecal volvulus involves various surgical approaches, including detorsion alone, caecopexy, and potentially a right hemicolectomy.
- The surgical modalities used depend on various factors, including the general condition of the patient and the presence or absence of bowel ischemia. Bowel resection and re-anastomosis for viable bowel are more effective and less morbid than other simple procedures.
- We report a case of CV following a routine colonoscopy. corrected with Laparoscopic right hemicolectomy showing excellent recovery while it ensures complete removal of the volvulus, eliminates the risk of recurrence, and allows pathological evaluation of the resected tissue while avowing the associated morbidity associated with Laparotomy.

## Case Report

- A 67-year-old Female attended the emergency department with progressive cramping abdominal pain starting in the lower abdomen and progressing to the right upper quadrant with associated nausea developing twenty-four hours following a routine colonoscopy with uncomplicated polypectomy.
- On examination, the patient was tender in the lower abdomen and right upper quadrant and was focally peritonitic. Initial Investigation showed unremarkable blood work. Computed Tomography with contrast of the Abdomen and Pelvis showed the cecum displaced into the right upper abdomen, with no distension of the proximal ascending colon with moderate fat stranding (Fig 1).
- Within the setting of the clinical findings and patient history, the patient underwent Laparoscopy on which Caecal volvulus (CV) was identified. The Caecum was ischemic, intact, and not perforated. The patient's caecum/ ascending colon was untwisted (Fig 2). A laparoscopic right hemicolectomy was performed.
- Subsequent histological examination showed attenuation consistent with mechanical obstruction without any sign of malignancy. The patient made a good recovery and was discharged on post-operative day five with a full recovery and no complications at 3 month follow up.

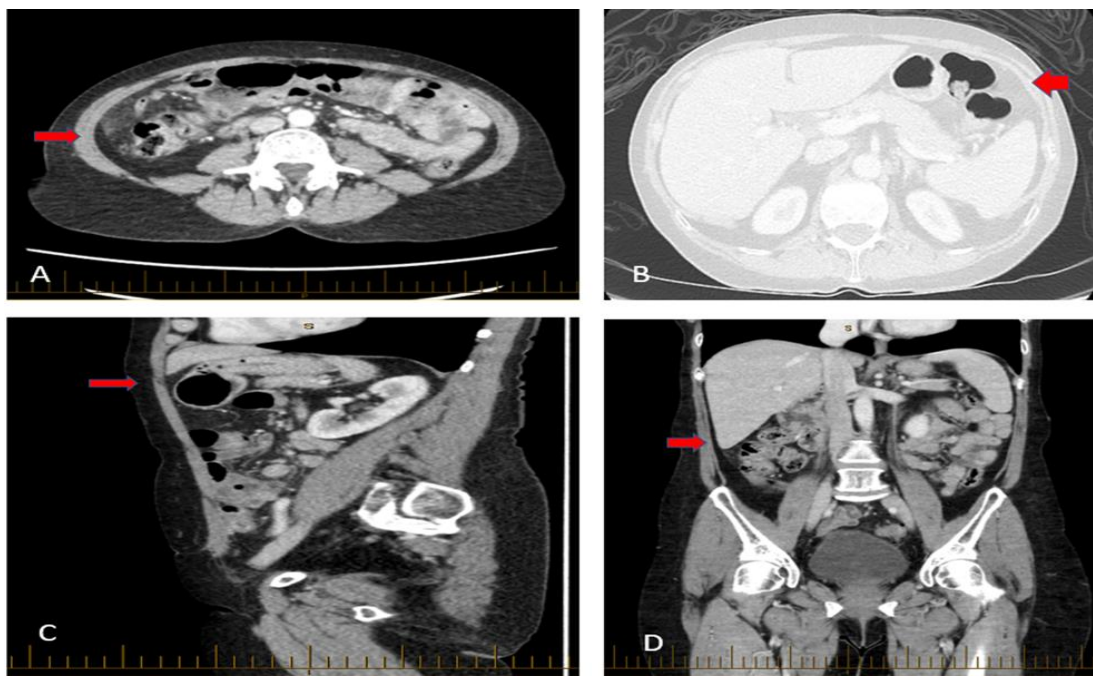


Figure 1: Computed tomography showing cecum is displaced into the right upper abdomen. Without distension of the proximal ascending colon

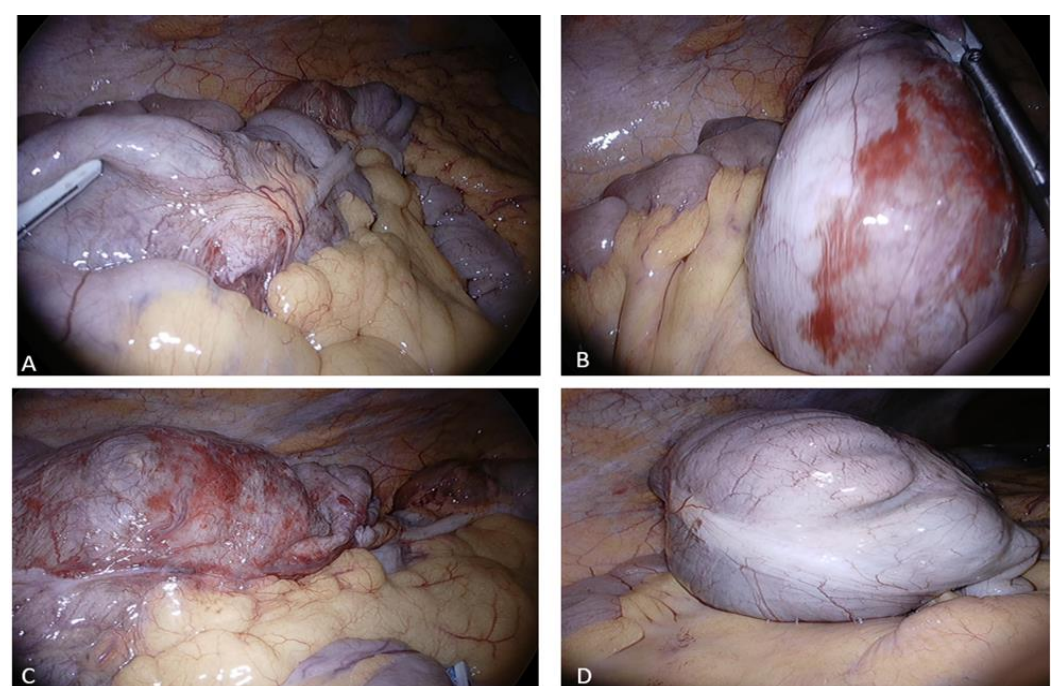


Figure 2: Intraoperative photos A, B, C showing; Caecal Volvulus with ulceration and ischaemia without evidence of perforation. D) Untwisted terminal ileum, cecum

## Discussion

- CV following colonoscopy is a rare but serious condition that requires timely diagnosis and prompt management to prevent bowel ischemia, perforation, and other complications demonstrated in previous case reports outlined in (Table 1).
- Diagnostic tools such as abdominal X-ray and CT scan may aid in diagnosis but laparoscopic assessment may be required for definitive diagnosis in the absence of convincing radiological findings as outlined in this case.
- Laparoscopic approach to Right Hemicolectomy reflects an effective treatment modality for Bowel resection and re-anastomosis for viable bowel and are more effective and less morbid than other procedures.
- Early detection and intervention can help minimize the risk of complications and improve patient outcomes. Therefore, clinicians should maintain a high index of suspicion for CV after colonoscopy and consider this rare complication in patients presenting with relevant symptoms