

Carcinoma Caecum - A Rare Presentation

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ABSTRACT

Caecal and right sided colonic cancers mostly present with fatigue, weakness and iron deficiency anemia. Such tumours rarely perforate posteriorly and involve the retroperitoneum. We report a case of an old Omani lady who came with insidious sign and symptoms of perforated caecum leading to retroperitoneal collection and necrotizing fasciitis of abdominal wall due to carcinoma of caecum. She underwent surgery but despite active intervention, she died because of septicemic shock.

Key words: *Carcinoma caecum. Necrotizing fasciitis. Retroperitoneal perforation. Shock. Mucoïd carcinoma.*

INTRODUCTION

Carcinoma in the right colon and Caecum more often present with melena and fatigue associated with anaemia, or abdominal pain if the tumour is advanced.¹ There may be a mass palpable in the right iliac fossa. Sometimes it is discovered unexpectedly at operation for acute appendicitis. A quarter of a caecal carcinomas present with the signs suggestive of appendicitis.² At times it can be the apex of an intussusception presenting with the symptoms of intermittent obstruction. Obstruction is uncommon. Rarely, this tumour can perforate posteriorly involving the retroperitoneum and leading to necrotizing fasciitis.

Necrotizing fasciitis is a soft tissue infection associated with high morbidity and mortality.³ A mixed pattern of organisms have been implicated. Severe wound pain, signs of spreading inflammation with crepitus and smell are all signs of infection spreading.⁴ The subdermal spread of gangrene is always much more extensive than appears from initial examination.

This case report describes the rare occurrence of a retroperitoneal perforation of caecum due to carcinoma leading to necrotizing fasciitis and fatal septicaemic shock.

CASE REPORT

An Omani lady aged 60 years, presented to the Accident and Emergency Department with complaint of severe right hip pain from the last 2 days. The pain was severe, persistent and deep in the hip, restricting the movements of the right leg. She came with the similar complaint a day before as well and received analgesia after which her pain subsided for the time being. But as she went home, the pain recurred.

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She had also presented to the Accident and Emergency Department one week earlier with complaints of generalized abdominal pain, vomiting, diarrhea and fever. She was diagnosed as acute gastroenteritis and was treated accordingly. She got improved and was discharged on oral antibiotics. She remained symptom free for 5 days and then again presented with severe right hip pain. She denied any history of trauma to affected extremity and any rheumatological problem previously. The rest of the medical and family history was non-contributory with no surgical interventions before.

Clinical examination showed that the patient had stable vital signs with BP of 110/60 mmHg, pulse rate of 86/minute, respiratory rate of 24 breaths/minute, temperature 37°C, and O₂ saturation of 100% while breathing on room air. The right leg was well perfused with limitation in range of motion at the hip joint and she kept it in mid flexion (psoas spasm). A part from right thigh area which showed some edema and tenderness on palpation but no crepitus, her rest of the leg and back examination did not reveal any abnormal findings. There were no lymph nodes palpable in the inguinal region. The rest of the systemic examination including abdominal examination was unremarkable.

The patient's laboratory investigations were all within normal range except ESR which was reported as 85 mm/hour. Her urine analysis was also normal. X-rays of the lumbosacral spine and pelvis were essentially unremarkable. Venous Doppler showed compressible veins of the right lower limb with no evidence of deep venous thrombosis. However, edema of the soft tissue and muscle planes in right thigh was noted. The lady was shifted to High Dependency Unit and commenced on I/V pethidine infusion.

The next day, the lady developed deep tenderness in the right iliac fossa. Repeat laboratory investigations showed raised WBC count of 21000/UI. An abdominal ultrasound scan was obtained which showed free fluid in right iliac fossa and surrounding retroperitoneum but no

mass or inflamed appendix could be delineated. An urgent CT scan of the abdomen with contrast was done which showed a posteriorly perforating caecal tumour into the retroperitoneum (Figure 1) with collection in the muscular planes and free air in the retroperitoneum extending upto right thigh muscle planes (Figure 2).

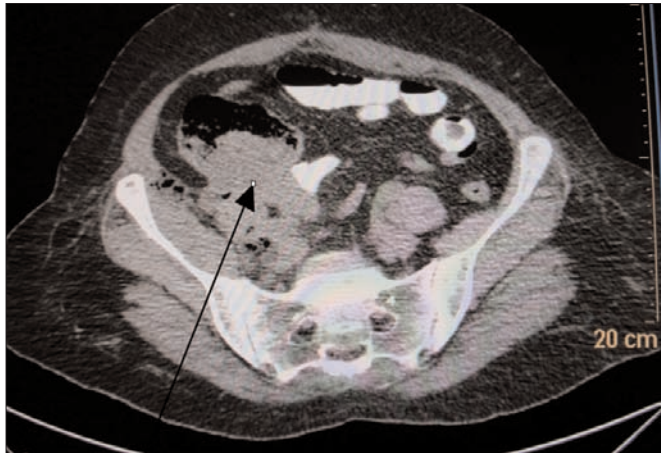


Figure 1: Perforated Ca Caecum involving the retroperitoneum.

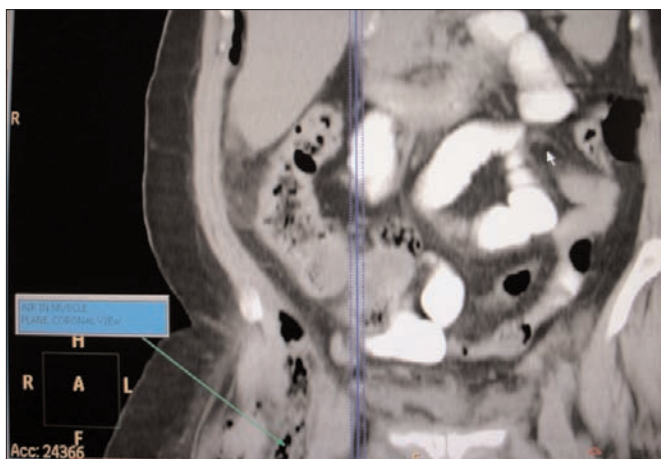


Figure 2: Air in the muscle planes with oedema; necrotizing fasciitis.

The patient underwent emergency laparotomy and operative findings showed a posteriorly perforating caecal tumour with a big pus collection in the retroperitoneum and necrotizing fasciitis of the abdominal wall extending upto right thigh muscles. The collection was drained along with thorough lavage and debridement of the cavity. Right thigh fasciotomy was also done. Biopsy was taken to confirm the diagnosis. Appendix was not found during the operation.

During surgery, the patient went into hypotension and blood pressure dropped down to 70/40 mmHg. Inotropes were started and surgery was curtailed to damage control. Tube cecostomy was performed and laparotomy wound left open with large drain left in the retroperitoneum. The bowel was covered with a plastic sheet that was stitched to the wound. The patient was shifted to Intensive Care Unit.

The patient remained in septic shock despite intensive management developed to multiple organ failure and ultimately expired after 2 days. The biopsy was reported as "mucoïd carcinoma of caecum".

DISCUSSION

There is a paucity of literature regarding such presentation of carcinoma caecum. There are often delays in the diagnosis of retroperitoneal abscess due to its insidious nature and it frequently extends beyond the peritoneum before being identified.⁵ Sign and symptoms of necrotizing fasciitis include high grade fever, localized pain, cellulites over the affected area, edematous soft tissues and subcutaneous emphysema. However, these clinical features can be quite subtle and the diagnosis requires a high index of suspicion.⁶

Retroperitoneal abscess rarely results from perforation of colon as most perforations occur into the peritoneal cavity.⁷ Patients who are predisposed to developing necrotizing soft tissue infections, regardless of the cause, are typically immunocompromised.⁸ But, this patient was neither diabetic nor immunocompromised. Adjuvant diagnostic tools for necrotizing fasciitis include CT scanning and plain radiography.⁹ However, clinical finding of crepitus and soft tissue air on plain radiograph is only seen in 37% and 57% of patient's respectively.¹⁰ Possibly the patient had the problem on the very first presentation when she presented with sign and symptoms of gastroenteritis. The antibiotics probably helped to contain the problem for some time till the tissue defense mechanisms gave up against the lethal malignancy.

Although rare, but caecal carcinomas can perforate posteriorly. The presentation in such cases may be misleading and high degree of suspicion is required for diagnosis. These perforation can lead to necrotizing fasciitis. This condition if not timely diagnosed and treated leads to lethal outcomes. Small blood vessels are occluded by microthrombi and the destruction of tissues is very rapid. At times the clinical signs and inflammatory markers might not be helping. In such state, ancillary investigations combined with clinical suspicion are helpful. The case also emphasizes the importance of CT scan diagnosing abdominal catastrophes in the presence of minimal clinical clues.

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