

CARCINOMA TRANSVERSE COLON IMPERSONATING AS ABDOMINAL ABSCESS – A CASE REPORT

**AUTHORS – DR. RAMANI RANJAN MUND¹, DR. SURESH AMAL CHAND²,
DR. SAURAV DAS³**

¹Associate Professor, Department of General Surgery, MKCG Medical College, Berhampur, Odisha, India

²Junior Resident, Department of General Surgery, MKCG Medical College. Berhampur, Odisha, India

³Junior Resident, Department of General Surgery, MKCG Medical College, Berhampur, Odisha, India

Corresponding Author : Dr. Saurav Das , Junior Resident, Department of General Surgery, MKCG Medical College, Berhampur, Odisha, India (Email – sdas581@gmail.com , Mob - 8763187361)

ABSTRACT

Colonic cancers most commonly present with pain abdomen, bleeding per rectum leading to anaemia and alteration in bowel habits. Rarely small perforation occurs leading to pericolic abscess on left sided colonic lesions and peritonitis on right sided colonic lesions. This is a case of 26 years old female presenting with abdominal pain and left upper abdominal lump to casualty with no evidence of pneumoperitoneum on X-ray erect abdomen and contrast-enhanced computed tomography showing an abscess extending into the left parities. This case is being reported for documenting the rare presentation of carcinoma of transverse colon, presenting as pericolic and parietal abscess, due to perforation.

KEYWORDS : Carcinoma colon , Pericolic , Parietal Abscess

INTRODUCTION

Colorectal cancer (CRC) is a taxing health problem worldwide. It is the third most common cancer in men and second most common cancer in women worldwide [1]. In India, the annual incidence rates (AARs) for colon cancer in men and women are 4.4 and 3.9 per 100000, respectively [2]. Colon cancer ranks 8th among men and 9th among women in India [2]. There is a 4.5% lifetime risk of developing colon cancer for men and women combined. CRC is diagnosed at a mean age of 68 in men and 72 in women. The percentage of cases diagnosed in patients younger than age 50 increased from 6% in 1990 to 11% in 2013 [1]. Younger patients who have colon cancer tend to present with constipation, hematochezia, bloating, rectal bleeding, and altered bowel habits [1]. Over 86% of those diagnosed under the age of 50 are symptomatic at diagnosis, which is associated with more advanced stage at diagnosis and poorer outcomes [3]. Colonic cancer perforations are infrequent, present mostly as pericolic abscess in carcinomas of sigmoid and rectum, and as peritonitis in carcinoma of right sided colon. [4] The formation of an abscess is seen in only 0.3%-4% of all colon cancer cases, and anterior abdominal wall abscesses occur due to malignant tumor invasion and

perforation, as reported previously[5]. These complications will hide underlying malignancies and result in a delay in diagnosis. We present such a case of carcinoma transverse colon presenting as pericolic abscess.

CASE REPORT

A 26 years old, female presented to the emergency department, with complaints of pain abdomen for 1month and abdominal lump in left upper abdomen from 10 days. There were two-three episodes of vomiting. History of on & off fever for 1 month. The pain was stabbing, sharp localised to the region of the lump. She is married with 2 living children with no other co morbid conditions. She denied any surgeries in the past, non-smoker, non-alcoholic, no recreational drugs, and sexually active with one male partner.

Physical examination showed lump in the abdomen in epigastrium and left hypochondrium with guarding and tenderness over the area. The lump was warm to touch. Her bowel sounds were present. Pulse rate was 110/min & low volume, BP - 96/68 mm of Hg.

Laboratory investigations showed raised total leukocyte count of 16,400/cmm, differential count (DC) of PMN-86%, Lym-6%, ESR 22mm/hr, negative pregnancy test and serum amylase and lipase within normal limits.

Plain X ray abdomen in erect posture showed few dilated small bowel loops, single air fluid level , and no evidence of pneumoperitoneum. Ultrasound abdomen showed a hypoechoic lesion with internal echoes, measuring 8 x 7 cms, in the left extending into the abdominal wall. Few dilated bowel loops were noted in the upper Abdomen.

Contrast-enhanced CT abdomen and pelvis showed large lobulated peripherally enhancing hypodense collection with air-fluid level in the anterior mid abdomen, measuring 98 x 77 mm , extending into the left parietal wall/rectus muscle. Mild reactive ascites was noted in the pelvis. (Fig. 3)

During her admission, incision and drainage carried out, 250-300 ml pus drained, and a PVC drain was placed. The patient was placed on broad spectrum antibiotics with anaerobic coverage. Pus culture grew *Staphylococcus aureus*, frequent *Escherichia coli*, *Bacteroides fragilis*, frequent *Klebsiella pneumoniae*, and frequent *Pseudomonas aeruginosa*. She was then put on sensitive antibiotics. Drain output reduced in 4 days and patient improved symptomatically. Repeat ultrasound abdomen showed no collection seen in abdomen or abdominal wall. Drain removed and patient was discharged with oral antibiotics.

The patient returned to the Emergency after 20 days with recurring pain abdomen and abdominal distension since 5 days. A repeat Contrast-enhanced CT scan of abdomen and pelvis showed evidence of well-defined mass like soft tissue density lesion measuring 61 x 36 mm with asymmetric circumferential wall thickening seen in the transverse colon of length 6 cms causing significant luminal narrowing with homogeneous enhancement. Few small volume lymph nodes seen adjacent to it suggesting neoplastic etiology.

Patient was advised colonoscopy which showed circumferential ulcero-obstructive growth present in transverse colon at 80 cms from anal verge covering all walls. Scope could not be negotiated above the lesion. (Fig. 1) Biopsy taken from the site showed invasive adenocarcinoma of the transverse colon. (Fig. 2) All other imaging studies were normal without any signs of metastatic cancer deposits.

Outcome/Follow-up

The patient was diagnosed with stage IIIB CRC. The patient underwent right extended hemicolectomy with end-to-end anastomosis of ileum and descending colon. (Fig. 4) Postoperative period was uneventful. Histopathological examination of the resected specimen showed adenocarcinoma with free resected margins. pTNM staging pT4N1Mx. Patient followed up for adjuvant FOLFOX6 chemotherapy treatment (Oxaliplatin 85 mg/m² IV, Leucovorin 400 mg/m² IV, Fluorouracil 400 mg/m² IV bolus, Fluorouracil 2400 mg/m² IV) every two weeks for six months with repeat imaging.

The location of the abscess and recurrent pain led to the recommendation to follow-up with repeat CECT and colonoscopy to determine the cause of the abscess. The cancer eroded the bowel, which then allowed bacteria to form an abscess in the pericolic area. Colonoscopy revealed the obstructive transverse colon growth, which was biopsied, and showed the adenocarcinoma.

DISCUSSION

Clinical presentation of carcinoma colon varies with the location of tumor. Left sided lesions present early with features of obstruction whereas right ones present late with anemia due to occult blood loss in stool.

Perforation associated with colonic cancers are seen most commonly at the site of the tumor due to locally invasive disease causing a breach of integrity of the colonic wall [6] or proximally in closed loop obstruction. Primary presentation of colonic cancer as perforation is about 2.6% to 10% [7]. Perforated tumors can present either as peritonitis or an abscess. Abscess formation is noted in about 0.3% to 0.4% of colonic carcinomas [8]. Perforations present twice as commonly as peritonitis than abscesses in the right and transverse colon cancers. Abscess formation is more common than free perforation in the left colon particularly in sigmoid and rectum [4]. This difference may be due to the more amount of pericolic fat and the more number small intestine coils which localize the inflammation to that site leading to abscess formation on left side.

Most commonly abscess formation occurs in the peritoneal cavity (localised), paracolic space, pelvic cavity [9] but they may also occur in unusual locations including retroperitoneum, abdominal wall, perirectal space, thighs and psoas muscle [10].

In this case, she had recurrent pain and abscess. Pus culture grew many bacteria that were consistent with infections in various locations in the body, including the GI tract. A colonoscopy and repeat CT were advised. Abscesses are rarely the presenting complaint that leads to the diagnosis of colorectal cancer [7]. The pathogens can help differentiate the site of origin after draining the abscess. With this patient, she had six different bacteria; the more concerning one for a GI involvement was *B. fragilis*. *Bacteroides fragilis* is a gram negative, anaerobic bacillus that colonizes all human colons [11]. A case described by Lam et al. that showed *B. fragilis* as the causative agent for a rare case of CRC [12]. This 26-year-old female follows the same trend, as the type of bacteria, location of the abscess and recurrent pain led to obtaining a colonoscopy and further imaging. The colonoscopy then revealed the growth, which led to the cancer diagnosis.

CONCLUSION

The willingness of the patient to follow up with her doctors due to the recurrent pain, as well as the appearance of the *B. fragilis* from the pus culture and location of abscess was key for advising a colonoscopy and further imaging, resulting in cancer detection. Differential diagnosis for recurrent abscesses and pain in the GI tract should include colonic cancer is an to make sure that it is not missed. Research work should be continued further could to link other cases of abdominal abscesses that led to diagnoses of colorectal cancer.

Fig. 1. Colonoscopy image



Fig. 2. Colonoscopic biopsy of transverse colon growth



Fig. 3. CECT abdomen image showing pericolic abscess extending into parietes

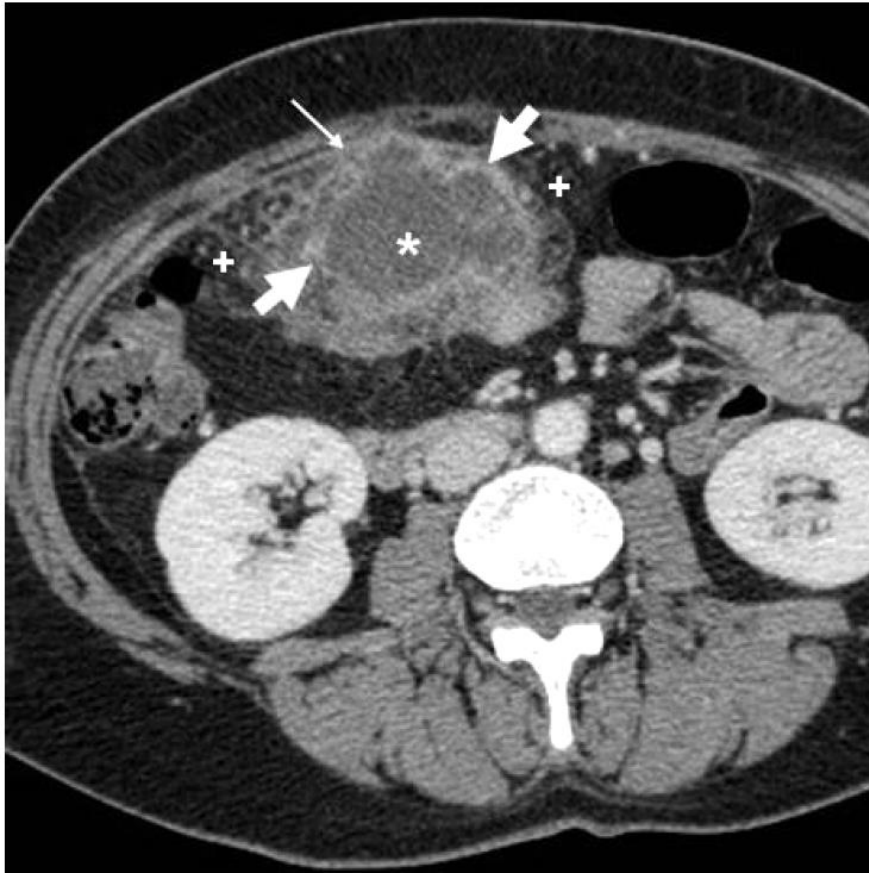
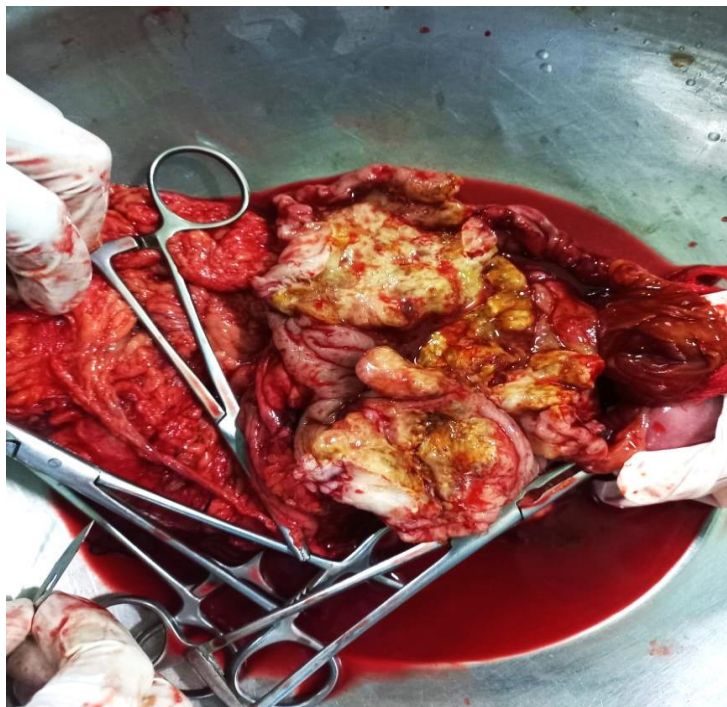


Fig. 4 . Resected specimen after extended right hemicolectomy



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