

Carcinoma transverse colon with caecal perforation mimicking appendicular lump

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Abstract

A 43 year-old female with caecal perforation and localized peritonitis as a result of transverse colon malignant stricture was presented. Initially she was evaluated in two different clinics and treated conservatively as appendicular lump. She was brought to Apollo Hospitals Dhaka as her condition deteriorated. CECT abdomen disclosed an annular soft tissue mass at mid part of transverse colon that completely obstructed the lumen. The colon proximal to the lesion and small bowel were grossly dilated and filled up with fecal matter. On laparotomy, a lump was noted in right iliac fossa which was made of omentum, small bowel and lateral abdominal wall. A perforation was noted in the lateral wall of caecum after dismantling the lump. The colon and the small bowel were decompressed through caecal perforation site peroperatively. Right hemicolectomy and primary anastomosis was performed. Patient survived the operation and she was discharged from hospital on the 10th postoperative day with an advice of regular follow up in surgical OPD. She was referred to Oncology centre for chemotherapy.

In conclusion, any patient around the age of forty or above with features of appendicular lump deserves full work-up including CECT to exclude colonic malignancy. Resection and primary anastomosis may be a preferred procedure for right colonic carcinoma perforation.

Case report

A 43 year-old lady was admitted in the Department of General and Laparoscopic Surgery, Apollo Hospital Dhaka with history of 2 months abdominal pain and distension, constipation and a lump in right iliac fossa. Initially, she was evaluated in two local clinics. No definite diagnosis was made with hematological tests, abdominal x-rays and ultrasonogram in those clinics and offered her exploratory laparotomy. The patient and her relatives were confused with uncertainty of laparotomy and accepted conservative treatment. Her condition deteriorated as days progressed and she was brought to Apollo Hospitals Dhaka for further evaluation and management. Past medical history revealed that she had on and off colicky pain in lower abdomen and an episode of bleeding per vagina for the last 2 years and she was under care of a Gynecologist.

On admission, she was ill-looking, apathetic and dehydrated. There was abdominal distension and an ill defined lump palpable in right iliac fossa. She was non-diabetic and non-hypertensive. Plain X-ray of abdomen showed distended proximal colon and small bowel with no evidence of gas in left colon. USG of abdomen revealed dilated small bowel loop suggestive of small bowel obstruction. CT scan of whole abdomen (Fig. 1) revealed a 4.4 x 3.1cm soft tissue annular mass at mid part of transverse colon completely obstructing the lumen. The colon proximal to the lesion was grossly dilated and filled up with fecal matter. The whole small bowel was also dilated moderately. The CEA level was 23.5ng/ml. A provisional diagnosis of carcinoma transverse colon with intestinal obstruction was made and an exploratory laparotomy was planned.

On laparotomy; an annular growth was noted in the right half of transverse colon. The colon proximal to growth

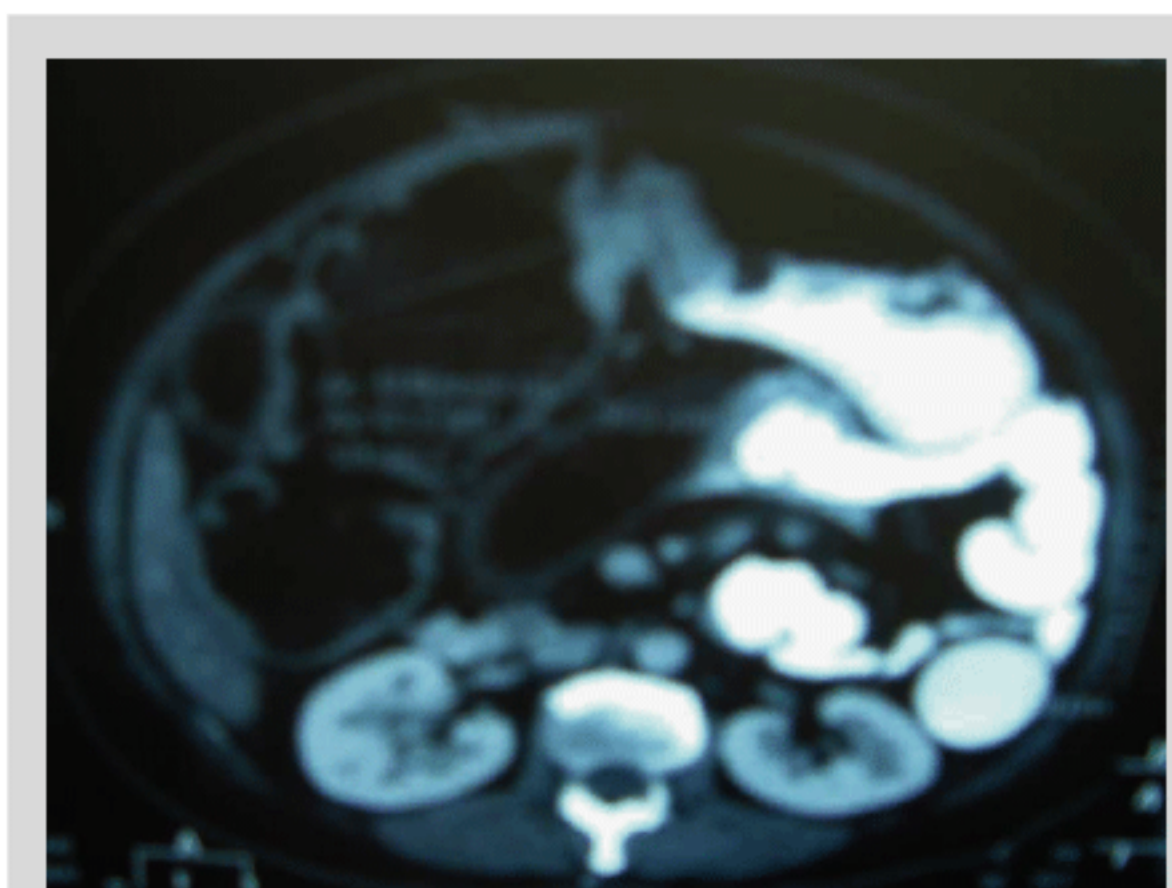


Fig 1: An annular growth in transverse colon completely obstructed the lumen associated with dilatation of colon and small bowel

including caecum was grossly dilated, and filled up with feces. The cecum and few loops of small bowel were wrapped by greater omentum forming a mass and firmly adhered to lateral abdominal wall in right iliac fossa. The whole small bowel was also grossly dilated and filled up with semisolid feces. There was no ascites or liver metastasis. On separating omentum from caecal wall, a perforation was noted at its lateral wall through which feces started to come out. The colon and small bowel decompressed through the caecal perforation site, about 5 liters of semisolid feces removed from the colon and small bowel. The peritoneal cavity was irrigated by 10 liters of normal saline. The transverse colon and the right colon

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were mobilized; the right extended hemicolectomy along with long segment of ileum were resected (as perforation occurred in ileum during mobilization). The ileo-colic anastomosis was performed. Abdomen was closed in layers after putting a drain in pelvis. Gross examination of the resected segment revealed that an ulcero-proliferative growth of 2.5 x 2.0 cm size was present in longitudinally opened resected transverse colon (Fig. 2). An ischemic perforation was noted at right lateral wall of caecum. Histopathological examination confirmed that the lesion was a well differentiated adenocarcinoma. The patient had an uneventful recovery except minor wound infection. Oncological consultation was taken for chemotherapy. She was discharged from the hospital on the 10th postoperative day with an advice of regular follow up.



Fig. 2: An annular growth in transverse colon completely obstructed the lumen

Discussion

The incidence of transverse colon carcinoma is less; about 5 to 12 % among all colonic cancer. The usual presentations of transverse colon carcinoma are alteration of bowel habit, abdominal pain, unexplained anemia, weight loss, intestinal obstruction, melaena etc. Colonic perforation and abscess formation associated with carcinoma is rare (1-2). The incidence of perforation in previous large series is 2.6 to 7.8 % (3-4). It is actually a late complication of colon carcinoma that occurs usually at or distal to tumor lesion if patient delays to seek medical attention or diagnosis is delayed. Progressive accumulation of feces and bowel secretions in colon distal to obstruction results in increased pressure in colon and causes perforation. When the caecal perforation is localized by omentum, patient presents with features of appendicular lump, otherwise patient may present with generalized peritonitis. This case presented to us with features of appendicular lump. Clinical diagnosis of such complications of colonic malignancy is difficult. Even endoscopy is unlikely to reveal perforations. Contrast enhanced CT scan (CECT) can help in most cases in such situation. On receiving and reviewing her previous data,

we have asked for whole abdomen CT scan and it explored the actual diagnosis. The fact is that this patient was evaluated and treated for two months in two different clinics and was not diagnosed properly. It is also a fact that colon carcinoma can present as appendicular lump / abscess without bowel symptoms which indicates the difficulty of early diagnosis. It also emphasizes the point that an elderly patient with appendicitis / appendicular lump requires a full work up for colonic malignancy (5). Resection and primary anastomosis is the procedure of choice in obstructive malignant lesion of right colon even with perforations, localized or generalized peritonitis (6). Although it is a text book teaching that resection, thorough peritoneal toileting and ileo-transverse colostomy is the procedure of choice in carcinoma colon with perforation and generalized peritonitis. In this particular case during laparotomy we were in a state of confusion whether primary anastomosis or ileo-transverse colostomy would be suitable for her after resection. The abdomen was irrigated by 10 liters of normal saline and primary anastomosis was done. The patient survived the procedure without any major complications. Patient is sent to oncology center for chemotherapy and asked for regular follow up in surgical OPD for every month for first year, every three monthly for next year and yearly for rest of the life.

In conclusion, any patient around the age of forty or above with features of appendicitis / appendicular lump deserves full work-up to eliminate colonic malignancy. CECT is the suitable diagnostic tool for such case. Resection, peritoneal toileting and primary anastomosis seems to be a preferred procedure for right colonic carcinoma perforation with localized peritonitis.

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