

An Unusual Presentation of Colonic Adenocarcinoma: A Case Report

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ABSTRACT

Colorectal cancer possesses a significant global health burden. Adenocarcinoma typically arises from a sequence of mucosal changes, and hence early screening and recognition are crucial for patient prognosis. However, varied clinical presentations and non-specific symptoms pose a diagnostic challenge. This case report will highlight the key clinical and pathological features of the colonic malignancy. A 45-year-old male presented with abdominal pain, melaena, and significant weight loss for a period of two months. On examination patient appears to be cachexic. On per abdomen examination, tenderness was present in the right iliac fossa, and per rectal examination showed black colored stools staining gloves and no Blumer's shelf deposits. After colonoscopy, imaging and histopathological confirmation, Patient was diagnosed to be a case of locally advanced adenocarcinoma of the right colon with local spread to gluteal muscles. Patient was started on neoadjuvant chemotherapy for downstaging and resection which later formed gluteal abscess right-side. It was managed with regular dressing and paraental supplement which showed healing on later stage and further chemotherapy was continued. This case report highlights the rarity of presentation of adenocarcinoma colon with local infiltration which later form local abscess and deposited in skin and subcutaneous region. Postsurgical management, patient developed enterocutaneous fistula which was managed conservatively with supportive measures. Fistula got closed spontaneously and the wound healed. Patient was started on chemotherapy; further tumour response is being assessed. The purpose of this case report is to review the nature of colonic malignancy and its presentation. The advanced cases are usually challenging and require multi-disciplinary approach and proper pre-operative planning.

Keywords: Adenocarcinoma colon, Enterocutaneous fistula, Extraluminal growth, Gluteal abscess

CASE REPORT

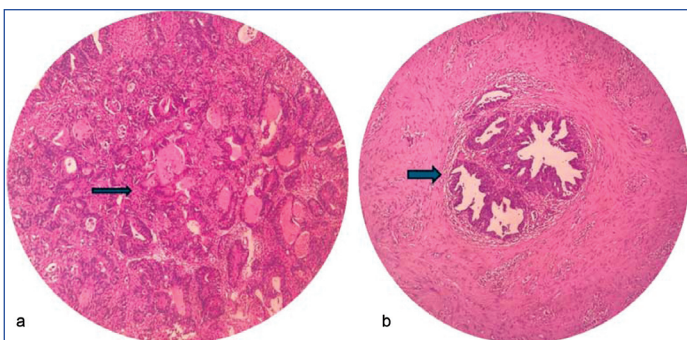
A 45-year-old male presented with abdominal pain of insidious onset with no specific aggravating and relieving factor for period of two months. A patient presented with a history of melaena occurring 4–5 episodes per month, interspersed with melaena-free intervals lasting up to two months. There was significant unintentional weight loss of more than 10 kg over the preceding two months. No other associated symptoms were reported. The patient had no known comorbidities and no family history of similar complaints. On general physical examination, pallor, mild pedal oedema, and significant muscle wasting were noted. Per abdominal examination revealed a soft abdomen with tenderness in the right lumbar and right iliac fossa regions, with no evidence of organomegaly. Per rectal examination demonstrated black tarry stools, with no palpable rectal growth or Blumer shelf deposits. Examination of the lymph nodes revealed no left supraclavicular lymphadenopathy. CECT was taken which showed ill-defined asymmetric wall thickening involving distal ileum, ileocolic, caecum for length of 10 cm and maximum thickness 2.6 cm and it seem to infiltrate right postero lateral abdominal muscle extending posteriorly into right ilioc muscle with prominent lymph node in right iliac and inguinal region [Table/Fig-1]. Patient blood investigation showed severe anaemia with Hb of 4.8 g/dL and hypoalbuminemia of 2.1 mg/dL. Blood transfusion and albumin infusion was done on alternative days for period of two weeks. After anaemia correction patient was taken for colonoscopy which showed friable ulceroproliferative growth with luminal narrowing in ascending colon [Table/Fig-2] and biopsies taken from the lesion sent for Histopathological Examination (HPE). HPE confirmed moderately differentiated adenocarcinoma with features of epithelium and glands lined by columnar cells with high grade dysplasia and increased nuclear cytoplasmic ratio, with nuclear stratification and loss of polarity [Table/Fig-3a,b]. As per the medical oncologist's advice, PET-CT was done, which showed intensively hypermetabolic circumferential mural thickening in proximal 2/3rd of ascending colon which extend into right paracolic gutter and infiltrating the



[Table/Fig-1]: CT image with blue arrow showing extraluminal component with ill-defined asymmetric wall thickening involving distal ileum, ileocolic, caecum and it seem to infiltrate right postero-lateral abdominal muscle.

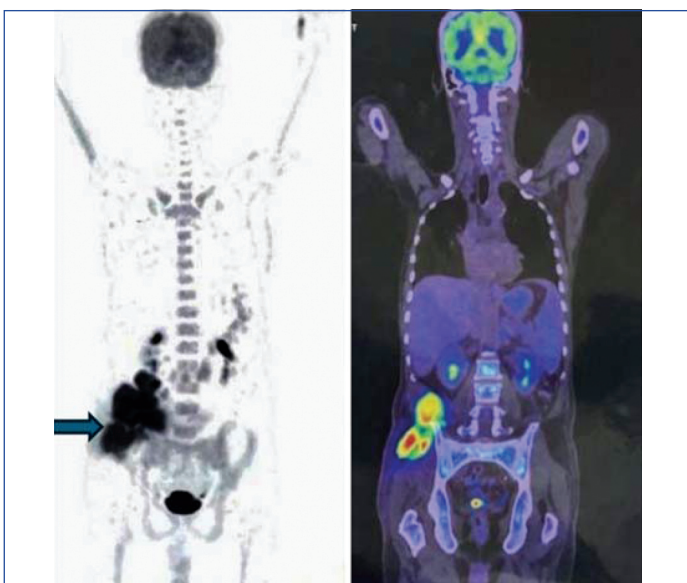


[Table/Fig-2]: Colonoscopy showing ulcer proliferative growth with luminal narrowing in the ascending colon.



[Table/Fig-3]: a) Histopathological image with blue arrow showing moderately differentiated adenocarcinoma; b) Histopathological image with blue arrow showing moderately differentiated tumour glands lined by pseudostratified columnar epithelium.

right lateral abdominal wall muscles [Table/Fig-4]. Patient was started on Neo adjuvant chemotherapy containing FOLFOX regimen (5-Fluorouracil, oxaliplatin, and leucovorin as per the National Comprehensive Cancer Network (NCCN) Guidelines downstaging of tumour. After completion of two cycles of chemotherapy, the patient presented with a gluteal region abscess associated with purulent discharge from the site. The discharge was non-offensive in nature. CECT abdomen was repeated which showed collection of size 6x6 cm in the subcutaneous and intermuscular plane in the right gluteal region in addition to findings of previous CT [Table/Fig-5]. Patient was taken for emergency incision and drainage of the abscess and edge wedge biopsy from ulcer site was sent to HPE which showed focal area of moderately differentiated tumour glands lined by pseudostratified columnar epithelium with high grade dysplasia and increased nuclear cytoplasmic ratio, with nuclear



[Table/Fig-4]: PET-CT showing increased uptake in the right-side of colon marked with blue arrow.



[Table/Fig-5]: CT image with green arrow showing collection of size 6x6 cm noted in the subcutaneous and intermuscular plane in the right gluteal region extending from right ascending colon and surrounding inflammation suspicious of fistulous tract from colon.

stratification and loss of polarity. Patient was followed-up for one month with regular dressing and granulation tissue was formed and showed healing. Further patient was continued on chemotherapy for downstaging the tumour and planned for curative resection for further management.

DISCUSSION

Colorectal cancer appears to be 4th common cancer to induce morbidity to the patient worldwide [1]. Spread of this malignancy occurs through haematogenous, lymphatic, and direct spread. However, skeletal metastasis is rare presentation in case of colonic malignancy. Skeletal muscles are remarkably resistant to metastasis because of dynamic contractions, fluctuations of blood flow, lactic/acidic environment, persistent of oxidative stress which makes unfavourable for tumour cells to proliferate [2]. Colon adenocarcinoma exhibits a broad spectrum of clinical presentations and can mimic various abdominal pathologies [3]. Colonic malignancy is more common in left-side whereas right-sided colon tumours are rare, hence, it is difficult to identify at early stage of disease [3]. Invasive form grows either in endoluminal or exophytic growth, however former is more common and typically appears as asymmetrical thickening of intestinal wall [4].

The most effective approach to treating colorectal malignancy involves early detection, staging, strategic use of chemo and radiotherapy to downstage the tumour followed by surgical resection [4]. In the present case, this standard treatment protocol was initiated. The presence of extraluminal growth, retroperitoneal invasion, local invasion to surrounding skeletal muscle make this case unorthodox from common presentation and challenging approach. These findings were previously reported in lymphoma, gastrointestinal stromal tumour rarely associated with adenocarcinoma of colon [5]. In this case there is abscess formation in gluteal region followed by chemotherapy which typically occurs in tumour perforation [6], whereas in this case the lumen is intact which is identified by absence of faeces in contents, limited sepsis with no clinical deterioration. The possible reason for the abscess formation is necrosis of tumour due to poor blood supply or response to chemotherapy and due to underlying localised perforation and delayed presentation which eventually presenting as locoregional extension followed by cutaneous invasion [7]. The abscess was drained, and skin specimen sent to the HPE showed metastasis of tumour which interim signifies direct extension of tumour. Managing malignant gastrointestinal fistulas is usually challenging, depends on patient medical condition and stage of disease but approached in multidisciplinary way [8]. The optimal management of enterocutaneous fistula is en bloc resection of the tumour with involved skin [9]. However, oncological cases concerned the patient co morbidities and body status must be adequate to undergo major resection and further the surgery should improve the quality of life further [10]. In our case patient performance status was not adequate to carry forward for further curative procedure so the patient was provided with routine regular dressing of the wound rather than excision of fistulous tract; as routinely done in fistula with underlying pathology. Patient was reviewed for assessment, and patient wound showed healing with closure of gaping wound area and decreased output from the wound site. Further patient was continued on chemotherapy for downstaging the tumour and planned for curative resection for further management. Fadaee N et al., presented a case of spontaneous enterocutaneous fistula secondary to locally advanced colorectal cancer [11]. Basukala S et al., presented a case which showed an ascending colon mass breaching the peritoneum with a fistulous tract opening into the subcutaneous plane. Exploratory laparotomy with extended right hemicolectomy and en bloc resection was performed, which was not present in our case, as chance of mortality was also high, hence curative resection was not attempted at first instance [3].

CONCLUSION(S)

This case report highlights the rarity of presentation of adenocarcinoma colon with local infiltration which later form local abscess and deposited in skin and subcutaneous region.

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