Spontaneous Colocutaneous Fistula: A Rare Presentation Of Colon Carcinoma

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Citation

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Abstract

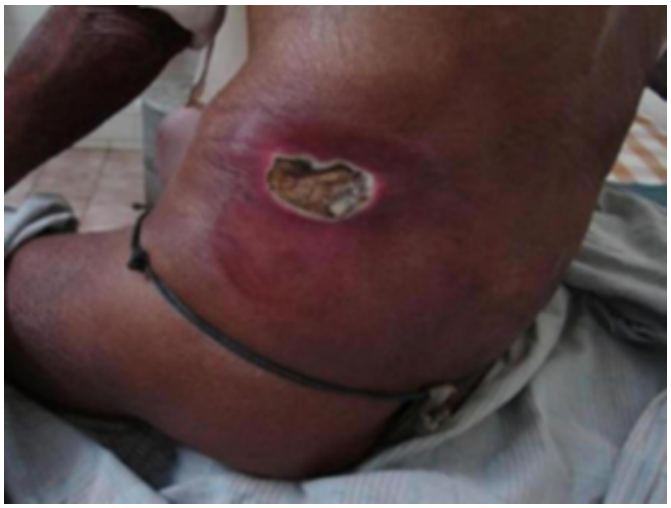
Colocutaneous fistula is a rare clinical condition and more often than not it is the result of surgical misadventures. The spontaneous form of this fistula is a still rarer entity that occurs usually in patients with diverticulitis or Crohn's disease. We report a patient, a 75-year-old male, who presented to us with spontaneous colocutaneous fistula secondary to carcinoma of the descending colon.

CASE REPORT

A 75-year-old male presented with the complaint of a painful swelling over the left loin since 7 days. The swelling opened spontaneously 4 days later discharging foul smelling purulent material (figure 1).

Figure 1

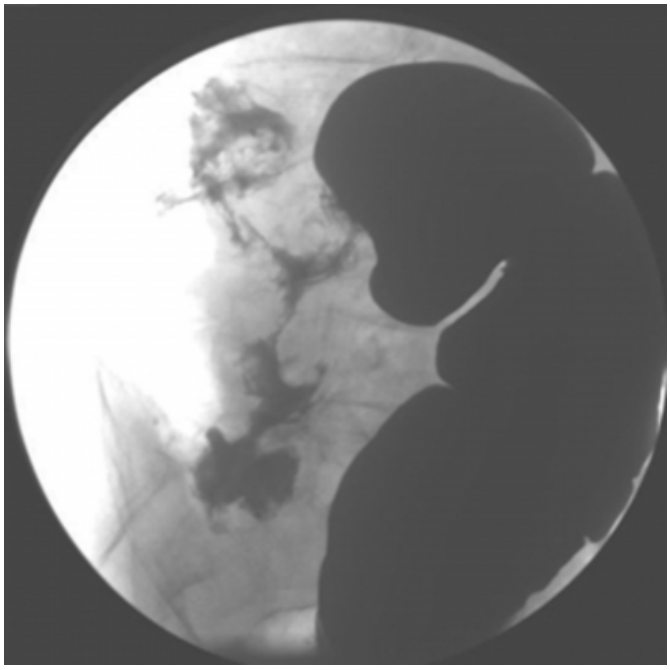
Figure 1: Preoperative view of the patient showing a faecal fistula over the left loin



The swelling was associated with fever. There was no history of trauma or previous surgery. There was no history of bowel symptoms or abdominal pain. Past history was insignificant except for treatment taken for multibacillary leprosy 2 years back. On examination, there was an ulcer of about 5x5cm over the left loin below the costal margin with feco-purulent discharge, erythematous skin surrounding the ulcer, a floor covered with slough and indurated base and edges. General examination revealed pitting pedal edema. Examination of the abdomen and other systems did not reveal much. Blood investigations were normal except for hypoalbuminemia. Barium enema revealed a colocutaneous fistula from the descending colon (figure 2).

Figure 2

Figure 2: Barium enema picture demonstrating extravasation of contrast medium from the proximal sigmoid colon or distal descending colon



Colonoscopy revealed an ulcerated endophytic growth about 40cm from the anal verge, which was biopsied and was reported as tubulovillous adenoma with severe dysplasia

with adjacent invasive malignancy. Ultrasonography of the abdomen revealed bowel wall thickening in the left lumbar region. With these findings, the patient underwent exploratory laparotomy and left hemicolectomy with excision of a rim of the abdominal wall at the site of the fistula (fig. 3, 4).

Figure 3

Figure 3: Intraoperative demonstration of the fistula site after mobilizing the descending and transverse colon

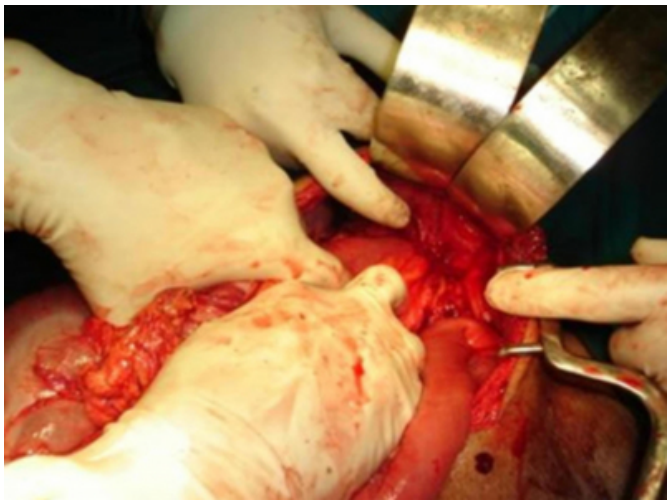
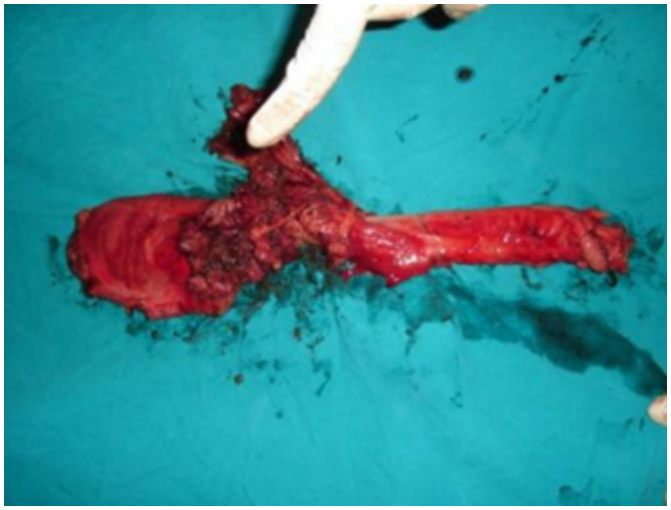


Figure 4

Figure 4: Resected specimen of colon with fistula



Histopathological examination of the specimen was reported as adenocarcinoma of the colon. Postoperatively, the patient was referred to the department of oncology for chemo-radiation.

DISCUSSION

Spontaneous fistulas of the colon result from diverticulitis, Crohn's disease, malignancy, appendicitis and pancreatitis, while surgical treatment of these conditions account for the majority of colonic fistulas. The rarity of such spontaneous colocutaneous fistulas, including those secondary to malignancy, is reflected by the lack of population based studies. Of 93 patients with colocutaneous fistulas associated with diverticulitis reported by Fazio et al.[1], 88 developed fistulas after operation, and in only 5 did the fistulas develop spontaneously.

Spontaneous colocutaneous fistula from carcinoma of the colon is rare. Such an event is still rarer today, as most of the carcinomas are diagnosed and treated at early stage. In the series reported by Zera et al.[2], of 68 enterocutaneous fistulas, none was from carcinoma of the colon.

Anastomotic breakdown or extension from inadequately resected bowel accounts for the majority of cases. Appendiceal fistulas may result from drainage of an appendiceal abscess or appendectomy in a patient with Crohn's disease. Occasionally, a diverticular abscess will discharge spontaneously through the abdominal wall. More often, a fistula results from surgical drainage of the same. Radiation therapy contributes to both spontaneous and postoperative fistulas. Russell and Welch[3] reported a 31% incidence of breakdown of primary anastomosis done in irradiated tissues. Crohn's colitis often results in adherence to adjacent organs with subsequent erosion to form a fistula. Fistulous formation is seen in 32-35% of patients with Crohn's disease[4]. In a series of 39 patients with enterocutaneous fistulas from Crohn's disease reported by Hawker et al.[5], 8 were colocutaneous fistulas.

In conclusion, colon carcinoma is a rare but important cause of spontaneous colocutaneous fistula and in turn, spontaneous cutaneous fistula is a rare presentation of colonic cancer. There is no provision given for colon carcinoma presenting with cutaneous fistula in ‘T' staging of the tumor and prognostic significance of such a presentation is not known.

References

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