

CASE REPORT

ENTEROCUTANEOUS FISTULA – A CASE REPORT

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ABSTRACT: Enterocutaneous fistulas most commonly develop as a post operative complication of bowel surgery, though in 15% to 20% of cases fistulas occur spontaneously. Development is more frequent after emergency surgery when the patient preparation is poor or in the chronically debilitated, mal nourished patient. Here we report a case of enterocutaneous fistula involving both large bowel and small bowel developed as a post operative complication of adhesiolysis with resection and anastomosis of small bowel for acute intestinal obstruction.

KEY WORDS: Enterocutaneous; Fistula; complication; resection.

INTRODUCTION: Enterocutaneous fistulas (ECFs) are abnormal communications between the bowels and skin (two epithelialized surfaces). A feared complication accompanied by intraabdominal abscesses and sepsis with a morality rate of 6.5 to 21% [1]. Most common post-operatively after inflammatory bowel disease, cancer, or lysis of adhesions. Patients present to us with prolonged ileus, febrile, erythematous wound with discharge of enteric contents.

CASE REPORT: A 28 year old female presents with history of discharge just above the umbilicus since four years. She gives history of undergoing exploratory laparotomy with adhesiolysis with resection anastomosis of small bowel done for acute intestinal obstruction due to adhesion with intraabdominal abscess.

On examination enterocutaneous fistula present over previous scar with feculent matter above the umbilicus was noted (FIGURE 1A AND 1B).

CT abdomen with contrast showed the flow of contrast in to the large bowel then in to small bowel loops suggestive of entero-cutaneous communications (FIGURE 2).

Exploratory laparotomy was performed and fistulous tract communicating into jejunum was noted with prolene stitch anchored to bowel wall in previous surgery (FIGURE 3).

The suture material (prolene) was removed and the fistulous tract excised (FIGURE 4). Resection and anastomosis of small jejunal loop was performed.

Post operatively patient recovered well and got discharged. There is no recurrence of fistula till date.

DISCUSSION: The vast majority of fistulas occur in the post-operative setting. Development is more frequent after emergency surgery when the patient preparation is poor or in the chronically debilitated, malnourished patient [1]. Causes include disruption of the anastomotic suture line, unintentional enterotomy, or inadvertent small bowel injury at time of closure [1].

Initial management of enterocutaneous fistulas includes fluid resuscitation, electrolyte replacement, nutritional support, bowel rest, and control of fistula drainage. Adequate nutrition while on bowel rest can be ensured with use of TPN.

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Nonsurgical therapy may allow spontaneous closure of the fistula, though this can be expected less than 30% of the time [2]. A variable amount of time to allow spontaneous closure of fistulas has been recommended, ranging from 30 days to 6 to 8 weeks [3]. During this preoperative preparation, external control of fistula drainage prevents skin disruption and provides guidelines for fluid and electrolyte replacement.

Somatostatin and its long-acting analogue octreotide are widely being used in fistula management. Several small, uncontrolled and heterogenous studies claim that octreotide can rapidly reduce fistula output by more than 50% in 1 to 3 days and help accelerate spontaneous fistula closure in more than 70% of cases [4]. Because of complex nature of our particular case, somatostatin and its analogues were considered but not used.

The preferred operation for fistula closure is resection of the fistula-bearing segment and primary end-to-end anastomosis [2]. The anastomosis may be reinforced by greater omentum or a serosal patch from adjacent small bowel [5]. Extra caution should be taken in the presence of radiation enteritis, since chronic ischemia inhibits wound healing and dense adhesions increase the likelihood of unintentional bowel injury [5]. Bypass or exclusion procedures are a safe alternative in irradiated bowel when dense adhesions are present or when patients are unable to tolerate more extensive operations [6].

CONCLUSION: Treatment options become increasingly limited as the number of complicating factors rises. Complex fistulas, as in our patient's case, may be associated with extensive small bowel resection, gastrointestinal bleeding, and abdominal wall defects. Even then in patients presenting with complex fistula the ideal treatment would be to do resection anastomosis of the bowel or musculo-cutaneous flaps as necessary as they provide well vascularised coverage. This is because simple closure of fistulous tract is associated with 41% failure rate.

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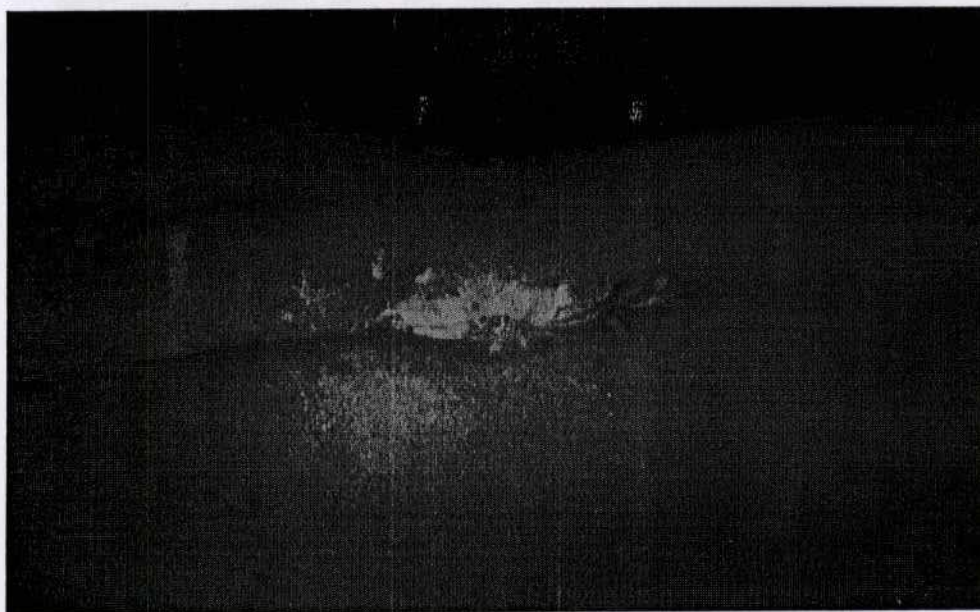


FIGURE 1A: FECULENT MATTER OVER OPERATED SCAR

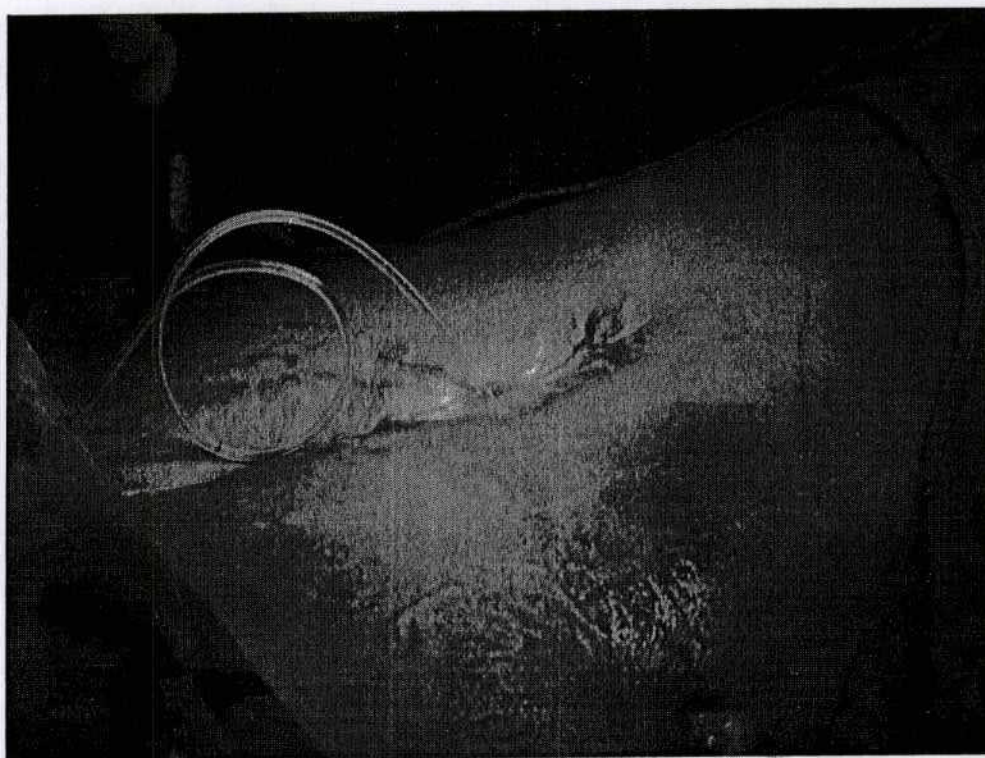


FIGURE 1B: RYLES TUBE PASSED THROUGH FISTULOUS TRACT

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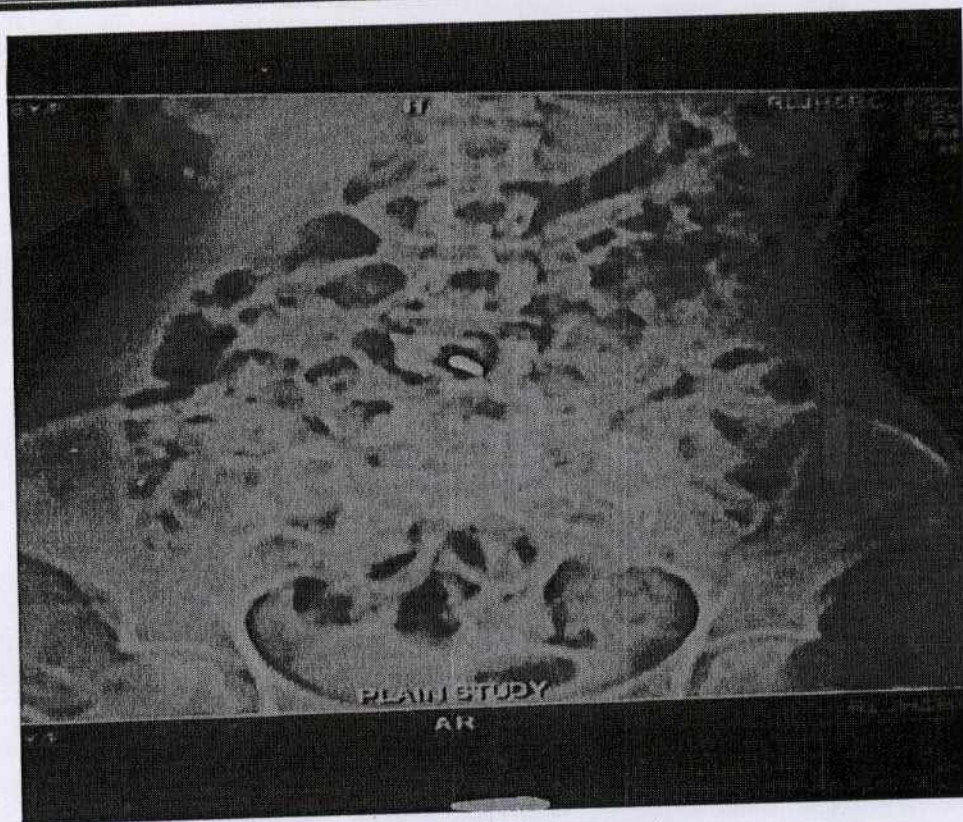


FIGURE 2: CONTRAST FLOW INTO ABDOMEN

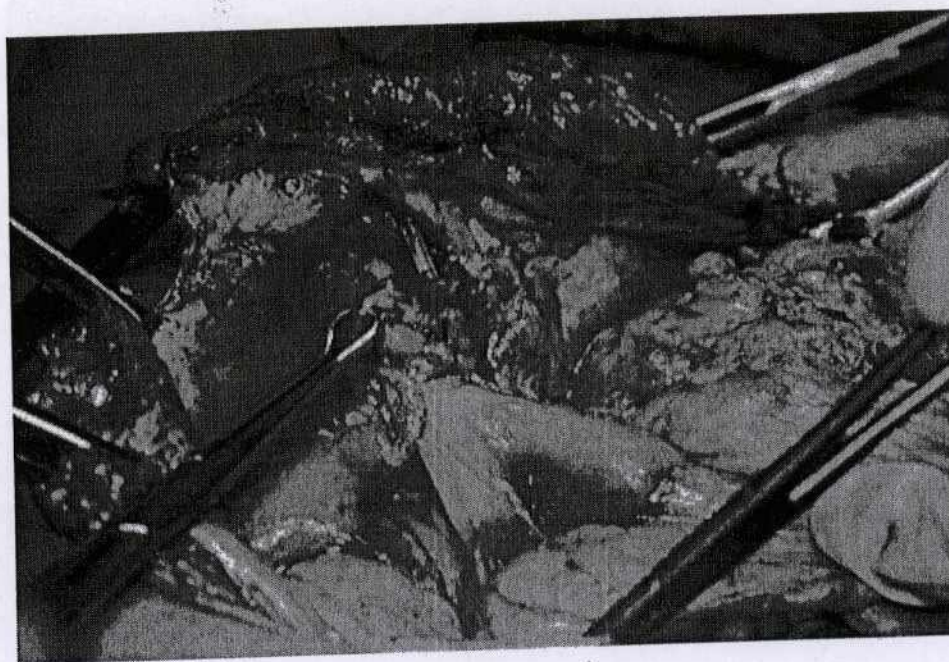


FIGURE 3: PROLENE BEING ANCHORED TO THE BOWEL WALL

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