



Emergency Laparoscopic Left Hemicolectomy for Tubercular stricture of descending colon presenting as massive haematochezia: A Rare Case Report

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Abstract

Abdominal Tuberculosis is a common disease. It poses diagnostic challenge when it involves uncommon sites and when it presents with rare symptoms. This may lead to delay in management and development of complications. We are presenting a case of primary tuberculosis stricture descending colon presenting as massive haematochezia and managed by Emergency Laparoscopic Left Hemicolectomy.

Keywords: *Emergency Laparoscopic Left Hemicolectomy, Tubercular stricture of Descending colon, Massive Haematochezia , Laparoscopic Left Hemicolectomy.*

Introduction

TB of the gastrointestinal tract commonly affects ileum and ileocaecal junction. It usually presents as sub-acute intestinal obstruction. Isolated primary tuberculosis (TB) of the colon is uncommon. It constitutes 9.2% of all abdominal TB.⁽¹⁾ The indication for surgery is either acute obstruction or perforation. Obstruction is caused by stricture in which usually malignancy is suspected in view of rarity of involvement of isolated segment of colon by TB. Massive haematochezia is very rare.

We herein, present a case of isolated TB of descending colon presenting as massive haematochezia and managed by Emergency Laparoscopic Left Hemicolectomy (ELH).

Case Report

A 67 year old male with no co-morbidities presented to emergency with history of bleeding per rectum, pain abdomen and giddiness since one day. There were no such episodes of bleeding in the past, weight loss or loss of appetite.

On examination, he was pale with stable haemodynamics. Per rectal examination revealed frank blood. Haematological investigations were normal except hemoglobin **8.3** (13.0 - 17.0 g/dl) hematocrit **25.5**.

A colonoscopy done revealed frank blood in the descending colon and proximal evaluation was not possible. Contrast enhanced CT(CECT) abdomen showed a stricture involving 7 to 10 cm segment of descending colon just beyond the splenic

flexure with narrowing of lumen and active contrast extravasation and pooling of the involved segment. There was also pericolic fat stranding and enlarged pericolic lymph nodes(Figure 1-A to D) In view of age of the patient , hematochezia

and CT findings showing a stricture , a preliminary diagnosis of malignancy was made. His serum levels of carcinoembryonic antigen (CEA) were within normal limits.

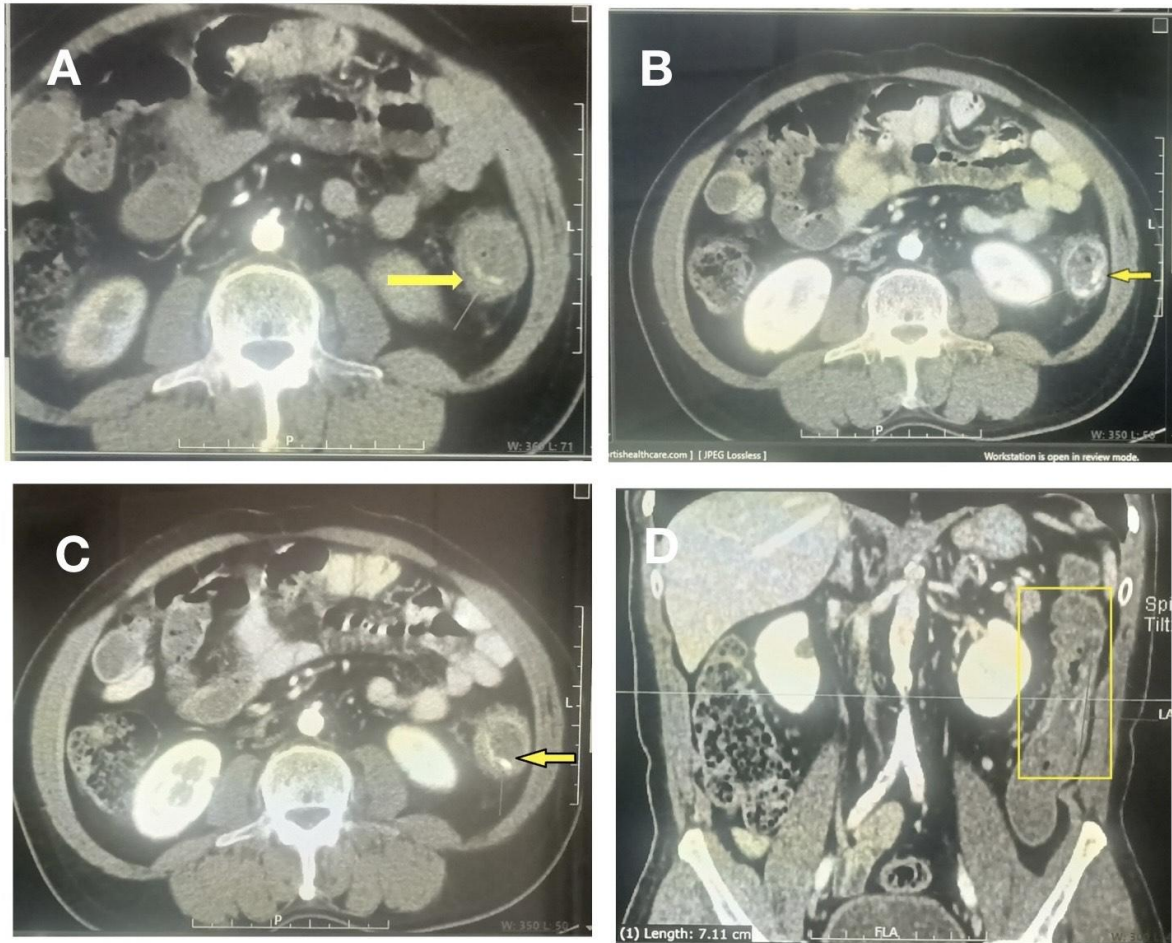


Figure 1:A. Venous phase showing intramural congestion and thickening of the descending colon. B & C. Early Arterial phase and Late Arterial phase– extravasation of blood. D. sagittal section – showing irregular mucosal and submucosal thickening with extravasation and pooling of blood.

He was admitted in the intensive care unit and supportive measures were started. He received 2 units of packed blood cells. He continued to have haematochezia with drop of haemoglobin to 7 gm%. A decision was taken for ELH after discussion in detail with the relatives. The

possibility of conversion to open surgery was also explained. He underwent ELH with medial to lateral, vessel first approach with lymph node clearance (Figure 2- A to D).Time taken for surgery 125 minutes. Patient was stable throughout the procedure.

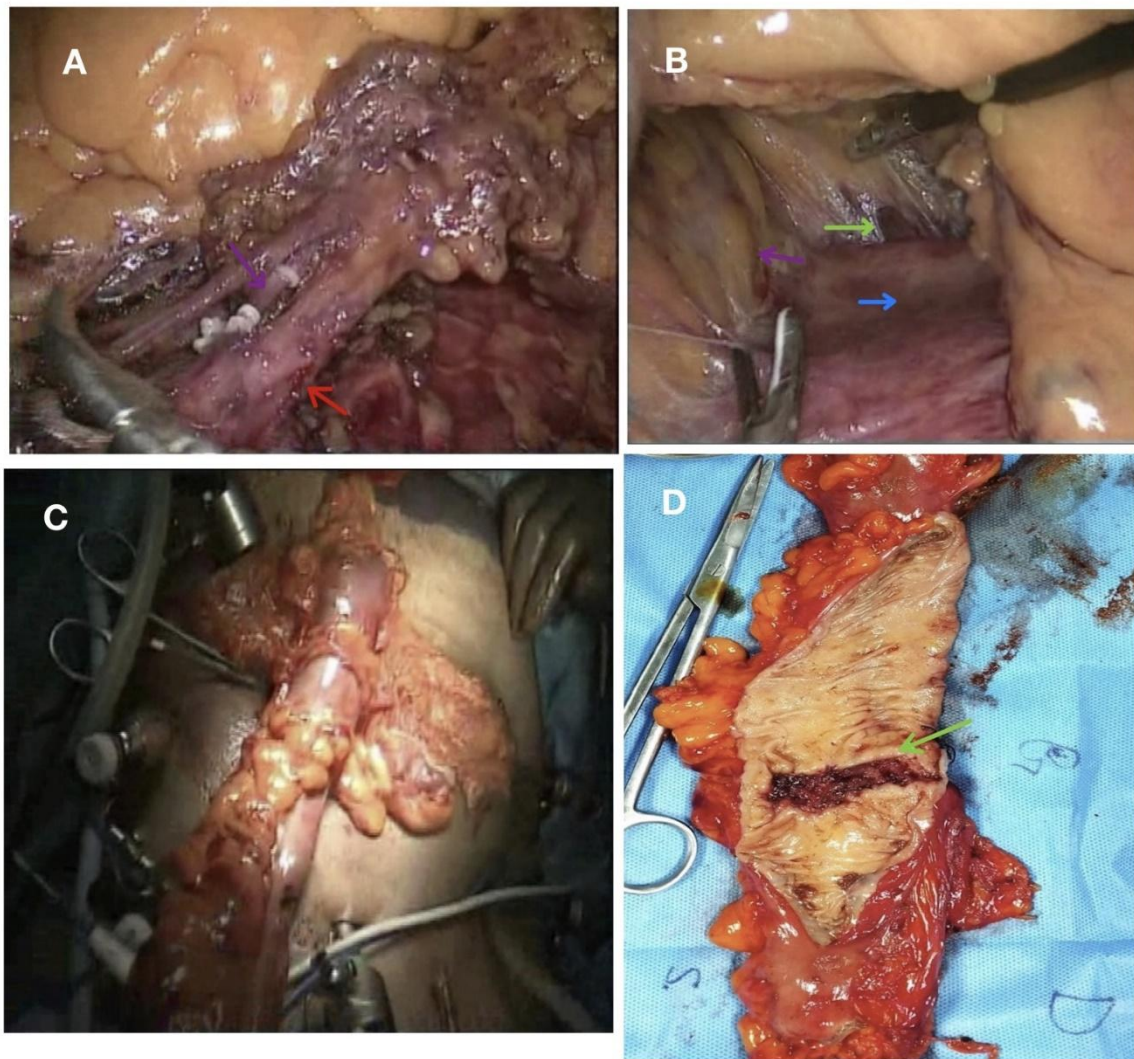


Figure 2: **A.** Clipping of Left Colic artery arising from Inferior Mesenteric Artery (IMA) . Red arrow IMA, Pink arrow Left Colic artery **B.** Splenic flexure mobilisation : Medial to Lateral approach .Blue arrow Intact Gerotas fascia, Pink arrow Transverse mesocolon, Green arrow Splenic flexure **C.** Specimen retrieval through periumbilical incision. **D.** Specimen cut open: Green arrow stricture with evidence of bleed

Patient was started on oral liquids on 2nd post operative day (POD) and soft diet on the 5th POD. Drain was removed and was discharged on the 5th POD. Histopathology revealed caseating

tuberculous colitis- descending colon with caseating tuberculous lymphadenitis. (Figure 3 A to D)The patient was started on Anti tubercular therapy. Follow up at 6 months was uneventful.

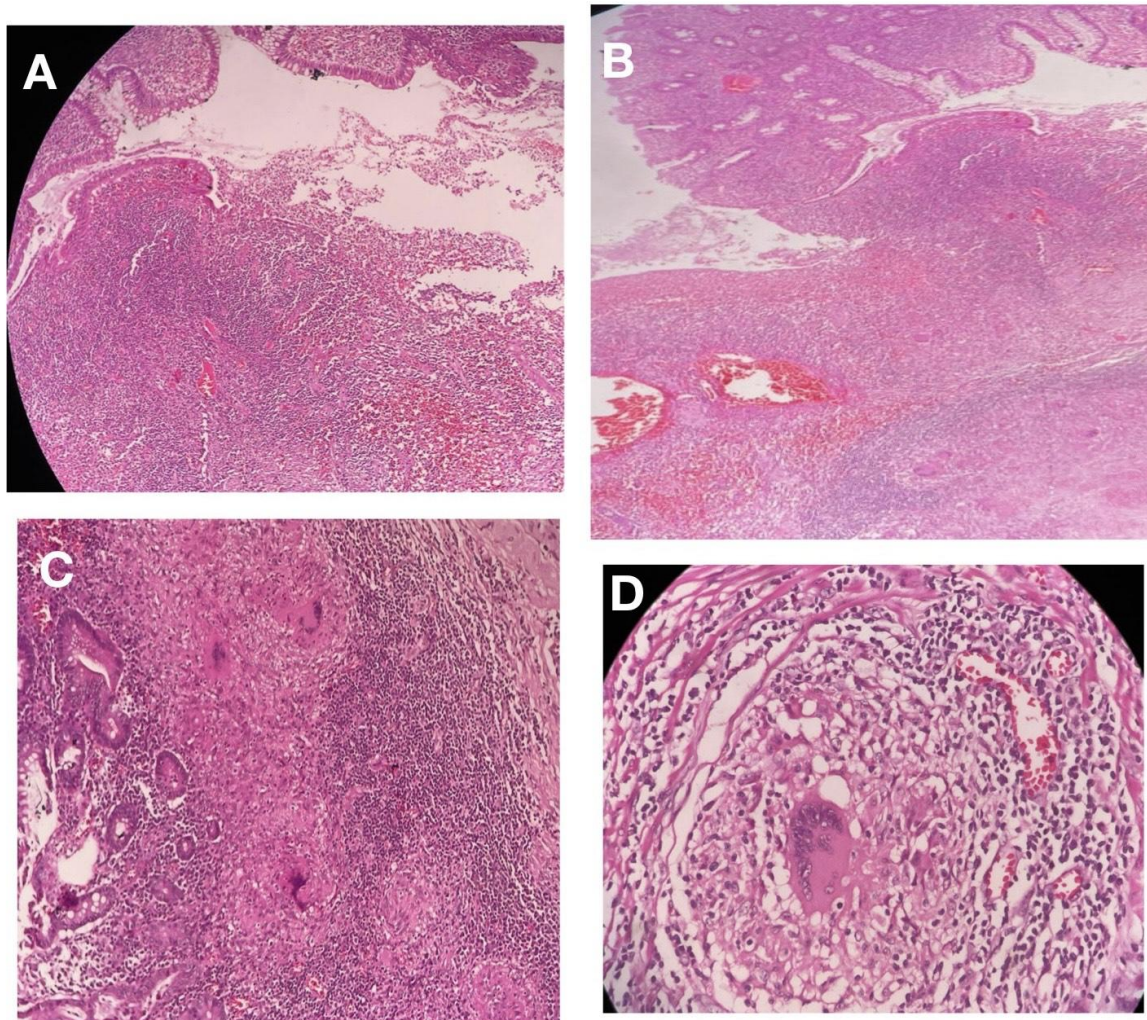


Figure 3: A & B (H & E – 4x) normal colonic mucosa and breach in the mucosal epithelium causing ulceration with the areas of granuloma. C & D (H& E- 10x) transmurally scattered epithelioid cell granuloma with Langhan's giant cell, central caseous necrosis and mantle of lymphocytes.

Discussion

Mild lower gastrointestinal hemorrhage can be seen in intestinal tuberculosis, but massive bleeding is rare⁽²⁾. The most common site of tubercular involvement of intestines is ileocaecum, most commonly of ulcerative variety. Acute presentation of intestinal TB include obstruction, perforation and mild lower GI bleed⁽³⁾

Laparoscopic Colectomy has become the standard of care for elective management of benign and malignant colonic diseases. Prospective randomised studies and systematic reviews have demonstrated the advantages of laparoscopy over open colectomy for elective surgery⁽⁴⁾ Despite these advantages, there are few data evaluating

laparoscopy for emergency colorectal procedures and there is skepticism regarding its potential benefits⁽⁵⁾

The case is reported due to the rarity of isolated involvement of colon by TB, rare presentation of TB with massive haematochezia and also of its management by Laparoscopic approach in an emergency setting.

This case was managed by Laparoscopic approach since the patient was haemodynamically stable requiring no inotropic support and the author had overcome the steep learning curve for elective laparoscopic colectomy for both benign and malignant conditions. Since malignancy was the primary diagnosis, a decision was taken to perform vessel first, medial to lateral approach so

that good lymph nodal clearance could be achieved. The operative time could have been shorter if the diagnosis of tuberculosis would have been proved in the preoperative period. Colonoscopy and biopsy also could not be completed due to failure of visualisation beyond the sigmoid colon due to ongoing bleed.

Well trained team of Surgeons, Anaesthetists, Intensivists, Operative theatre nurses and technicians is very essential before deciding upon attempting these major emergency cases by laparoscopic approach.

Conclusion

High index of suspicion of TB is required in Indian subcontinent whenever a patient presents with massive haematochezia .With increasing experience, Emergency Laparoscopic Left Hemicolectomy is safe and feasible in emergency settings.

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