



A CASE OF RETROPERITONEUM CAECAL PERFORATION IN EXTENSIVE ABDOMINAL TUBERCULOSIS

General Surgery

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ABSTRACT

Abdominal tuberculosis remains a critical health concern, often seen with complication that necessitate surgical management. We present the case of 31-year-old female presented with features of peritonitis, which on laprotomy presented with a caecal perforation with 2 complete non-passable strictures proximal to ileo-caecal junction. A right hemicolectomy along with jejuno-colic anastomosis and peritoneal toiletting done and on histopathology revealed non-caseating epithelioid granulomas by thick rim of transformed lymphocytes and reith like giant cells. Granulomatous ileitis /? Tuberculous ileitis. We report this rare case of retroperitoneum caecal perforation in extensive abdominal tuberculosis to sensitize the medical fraternity to this rare occurrence, which will be highlighting the importance of the increasing incidence of abdominal tuberculosis all over the world, especially among the developing countries.

KEYWORDS

BACKGROUND

Intestinal tuberculosis is an extremely common occurrence in developing and underdeveloped countries. In intestinal TB a portion of the gastrointestinal tract may be affected, because of various pathogenic mechanism involvement. However, primary isolated caecal perforation due to tuberculosis is an unusual occurrence, we report this rare case, the diagnosis of which was made retrospectively, in a view to sensitize the world to this rare case of abdominal tuberculosis.

Case Presentation

A 31-year-old female presented to the emergency department in the month of January 2025, with complains of abdominal pain in all quadrants and associated with complain of multiple episodes of vomiting and not passing flatus and motion and low-grade fever since last 6 days. She was a k/c/o abdominal tuberculosis and was on medication from the last 10 days and had no other significant history of prior medication, surgical history or any evidence of traumatic event were present.

On examination patient had tachycardia, tenderness and guarding in all quadrants of abdomen. Her routine blood test were within normal limits, with completely normal counts. Her HIV, HCV and HBsAg were negative. Her X-ray erect abdomen showed gas under diaphragm. USG abdomen suggestive of bowel loops appears dilated and shows to & fro movements s/o? Bowel obstruction. Colonoscopy which was done on 1-1-25 s/o thickened ulcerated mucosa with luminal narrowing seen just beyond hepatic flexure. Scope could not be negotiable beyond it. Biopsy taken and s/o tubercular colitis. Clinical suspicion of an obstruction leading to perforation was made. The patient was taken for emergency OT, via a midline incision operation was proceeded. Intra-operative, a 1*1cm perforation at caecum with multiple adhesions (significantly at ileo-caecal junction) and 2 completely non-passable strictures at 30 and 70 cm proximal to ileo-caecal junction. The other organs were normal and there was no lymphadenopathy seen. A right hemicolectomy with side-to-side jejuno-colic anastomosis was done and the specimen was sent for a histopathological examination (fig 1) a biopsy of the same specimen was done. The biopsy reported features of non-caseating epithelioid granulomas are surrounded by thick rim of transformed lymphocytes and reith like giant cells. The lamina propria is densely infiltrated by lymphoid tissue. The submucosa shows minimal inflammation of mixed inflammatory infiltrated in lamina propria and serosa s/o granulomatous ileitis /? Tuberculous ileitis (fig 2) more over, the peritoneal biopsy ZN stain - AFB was not detected. Then a retrospective study was performed for the assessment of the case management. Her X-ray chest was normal, Mantoux test was negative, ESR was 18 mm at 1hr and sputum CBNAAT was negative. The patient was still continued with anti-tubercular therapy (DOTS category 1 - incorporating 4 drugs, viz. Isoniazide, rifampicin,

pyrazinamide and ethambutol for the first 2 months of the intensive phase, and isoniazide and rifampicin for the next 4 upcoming months as the continuation phase), patient showed satisfactory results along with overall improvement in condition of patient. The patient is being followed up regularly in every 2 weeks.

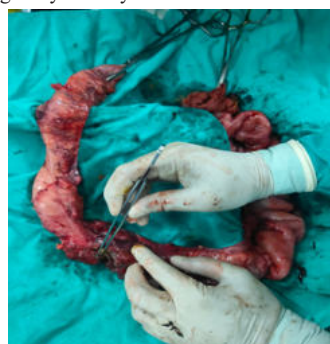


Figure 1: Post Operative Specimen, Clearly Demonstrating The Caecal Perforation

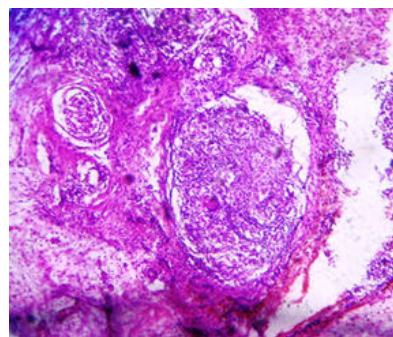


Figure 2 Showing The Histopathological Microscopic Appearance

DISCUSSION.

Caecal perforation with retroperitoneal involvement is a rare manifestation of abdominal TB. Caecal perforation may be seen associated with disease such as diverticular disease, inflammatory bowel disease, Ogilvie syndrome, closed-loop obstruction, pancreatic carcinoma, colorectal carcinoma etc. in the presence of the patent ileo-caecal valve. In this case, the patient presented with nonspecific symptoms and signs of perforation with obstruction. Imaging, particularly contrast-enhanced CT, was suggestive of multifocal circumferential asymmetric wall thickening of terminal ileum, ileocecal valve, cecum & proximal ascending colon which is approx

more than 13cm long segment with transmural perifocal infiltration & associated necrotic regional ileo colic lymphadenopathy along with small hyperdense perifocal collection .skip lesion in mid ileal region, small segmental proximal obstruction, possibility of tubercular etiology seems more likely involvement. the management involves surgical intervention, in our case right hemicolectomy with retroperitoneal drainage was performed.histopathology confirmed the diagnosis and att was continued postoperatively .ileocecal tuberculosis has always been challenging to physician , patents often ending up with acute /subacute obstruction.the precise incidence of git tuberculosis is not known. However, the reported incidences varies from 0.02% - 5.1% in various series. Further more the exact mechanism for an isolated caecum involvement remains unknown.

Surgeons must remain vigilant for atypical presentation in such case, early surgical management along with att is crucial for favorable outcome.

CONCLUSION

Retroperitoneal, caecal perforation presents as rare and severe complication of abdominal tuberculosis, often presenting with non-specific clinical features that can delay its diagnosis. This case highlights the necessity of maintaining a high index of suspicion for tuberculosis in patient presenting with atypical abdominal symptoms. The timely surgical intervention along with att remains the main treatment in managing such rare cases.

Consent

The patient has given her written as well as an informed consent for the publication of this case.

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