

Isolated Ascending Colon Tuberculous Perforation

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Introduction

Tuberculosis is known to involve any segment of gastrointestinal tract, however involvement distal to ileocaecal junction is rare. Isolated tubercular perforation of ascending colon is rare. We report a rare case of isolated ascending colonic tubercular perforation who was successfully treated with primary suturing of colon.

Case Report

A 19 year old male patient presented with acute pain in right lower quadrant of abdomen since 2 days. He had history of fever since 3 to 4 days. No history of loose motion or constipation or any other bowel complaints. No history of abdominal trauma. No past history of Kochs or Kochs contact. On clinical examination, patient had tachycardia of 110/min and blood pressure of 110/70 mm Hg with total leucocytes count of 12000/cu mm and ESR - 78 mm at the end of an hour. Plain radiograph of chest revealed gas under the domes of diaphragm with no evidence of active or healed pulmonary Kochs. Patient was subjected to emergency exploratory laparotomy which revealed minimal contamination in the form of pus more in right side of abdomen and pelvis. There was a 1 to 1.5 cm perforation in the anterior wall of ascending colon about 5 cm from the hepatic flexure with no distal stricture or growth. There were multiple mesenteric lymphnodes. Ileocaecal junction, small and the rest of large intestine were normal. Biopsy from the edge of perforated colonic ulcer was taken. In view of minimal contamination, small, single perforation, primary suturing of the colon was done. Mesenteric lymphnode biopsy was taken. Postoperative period was uneventful. He was started on Antituberculous drugs and discharged home. Patient had 1 kg of weight gain after 15 days of follow up. He was totally

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Fig. 1 : Histopathology of perforated colonic wall biopsy which is suggestive of tuberculosis.

asymptomatic at 6 months of regular followup.

Discussion

Colonic tuberculosis is an uncommon condition and further rarity is its presentation as perforation.¹ About 3% of patients with abdominal tuberculosis have isolated colonic tuberculosis.² The ileocaecal area is reported to be the area most commonly involved in colonic tuberculosis.³⁻⁶ The apparent affinity of the tubercle bacillus for lymphoid tissue and areas of physiologic stasis facilitating prolonged contact between the bacilli and the mucosa may be the reason for the ileum and caecum being the most common sites of the disease. Other areas of the colon besides the ileocaecal area represent the next more common site of tuberculous involvement of the gastrointestinal tract, usually manifested as segmental colitis involving the ascending and transverse colon.³ Colonic tuberculosis may present as an inflammatory stricture, hypertrophic lesions resembling polyps or tumours, segmental ulcers and colitis or

rarely, diffuse tuberculous colitis.⁶ The diagnosis can be quite difficult since there are no specific clinical symptoms of large bowel tuberculosis and only a quarter of patients have chest radiographs showing evidence of active or healed pulmonary Kochs.¹ Our patient had presented with right lower quadrant pain and fever. His chest radiograph showed no evidence of Kochs, but gas under diaphragm was present suggestive of bowel perforation. As our patient had presented with perforative peritonitis, emergency exploratory laparotomy was done. Our patient did not have any stricture or distal obstruction with minimal contamination and had perforation of the ascending colon. In colonic perforation following trauma routinely colon stomas are preferred as compared to colonic resection and anastomosis. However Shanon *et al* have laid guidelines on colon injury severity and management of colon perforation and suggested primary colon suturing if the perforation is small, with minimal contamination, with good vascularity and if patient is haemodynamically stable.⁷ Matolo *et al* also reported decreased morbidity and mortality following primary colonic repair in colonic trauma.⁸ Our patient satisfied the criteria of having small, single ascending colon perforation, with minimal contamination with good vascularity and patient was haemodynamically stable. Hence primary suturing of colon was done. Histopathology of perforated colonic wall biopsy and mesenteric lymphnode revealed tuberculosis. Due to nonspecific clinical manifestation and radiological features of colonic tuberculosis, laparotomy with biopsy

is often needed to diagnose the disease.

Conclusion

Isolated colonic tuberculosis perforation being the rarest form of intestinal tuberculosis poses great difficulty in diagnosis. High index of suspicion, supported by radiological investigation, exploratory laparotomy and histopathological examination of tissue biopsy can only lead to a definitive diagnosis of this rare condition. Surgical treatment involves either primary suturing or stomas followed by Antituberculosis chemotherapy.

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