



A CASE OF SIGMOID COLON STRICTURE - TUBERCULOSIS THE GREAT MIMIC

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Abstract :

BACK GROUND -

Segmental colonic tuberculosis being a rarity in sigmoid colon with limited no of cases reported so far.

CASE REPORT -

A 68 yrs old male presented with lower abdominal pain of 1 month duration, associated with dysuria and difficulty in micturition. There was history of loss of appetite, weight with constipation present on and off. Investigation revealed a stricture involving long segment of sigmoid colon and adherent to posterior wall of the bladder on the left side. Possibility of malignant or inflammatory etiology. Cystoscopy guided biopsy of bladder lesion showed granulomatous lesion. Diagnostic laparoscopy done and proceeded with Laparotomy resection of stricture segment of sigmoid colon and primary colocolic anastomosis. Histopathology report confirmed tuberculous colitis. Patient was started on anti tuberculous (ATT) medication. Patient is on regular follow up.

CONCLUSION -

Tuberculosis is known to involve any segment of gastrointestinal tract. While tuberculosis of the small bowel is common, isolated primary tuberculosis of the large bowel is quite uncommon. Tuberculosis of colon forms only 3 to 4% of intestinal tuberculosis. Tuberculosis of the colon tends to be segmental and usually obstructive symptoms dominate. However the diagnostic challenge is very high when isolated colonic segments are involved with tuberculosis.

Keyword : Tuberculosis (TB), Gastrointestinal (GI) tract, Anti tuberculous drug (ATT).

INTRODUCTION:

Tuberculosis (TB) infection is still common and remains an important cause of morbidity and mortality, particularly in developing nations. The gastrointestinal (GI) tract is the sixth commonest extra pulmonary site to be affected after lymphatic, genitourinary, bones and joints, miliary and meningeal involvement. Manifestations can be non-specific and mimic many conditions, including malignancies.

ON EXAMINATION: General condition fair. The patient was moderately built and nourished. Examination of abdomen: Flat, umbilicus normal in position, all quadrants move equally with respiration, No obvious mass palpable per abdomen, No organomegaly / free fluid. Per rectal examination - normal study. Other system examination - normal.

INVESTIGATIONS:

All basic blood investigations were found to be within normal limit. Urine cytology - f/s/o acute infective pathology, no e/o malignant cells seen.

USG ABDOMEN:

hypo echoic mass lesion with echogenic foci seen in the urinary bladder wall measures 2.8 x 1.9 cm. ? Mass urinary bladder. **BARIUM ENEMA:** Segmental narrowing of sigmoid colon with abrupt transition zone. Features more likely of growth than inflammation. ? Diverticulum / polyp in descending colon / sigmoid junction.

CONTRAST CT ABDOMEN:

There is long segment circumferential wall thickening involving sigmoid colon. Small nodular heterogeneously enhancing soft tissue lesion involving left posterolateral wall of urinary bladder. CEA- 2.3 ng/ml.

COLONOSCOPY:

scope passed 20cms from anal verge & not beyond that due to luminal narrowing. Imp: ? Rectal stricture. Biopsy could not be attempted.

DIAGNOSTIC CYSTOSCOPY:

Papillary lesion noted in left lateral wall of bladder, distant from ureteric orifice, with bulge noted. The same was biopsied and sent for HPE. Rest of bladder mucosa normal. HPE - Cystitis probably tuberculous origin. No evidence of active foci of tuberculosis elsewhere.

PROCEDURE:

Diagnostic laparoscopy done, shows strictured growth involving segment of sigmoid colon found densely adherent to the posterior & left lateral wall of bladder. Hence, proceeded with laparotomy. A firm mass of size 8*6cm present in sigmoid colon found adherent to the left posterolateral wall of bladder.

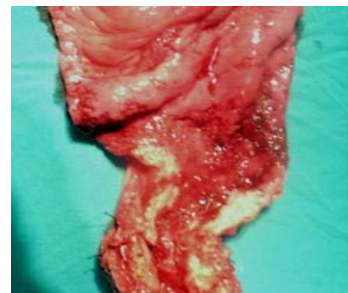
On table frozen section done, shows granulomatous colitis. In view of benign pathology resection of stricture segment of sigmoid colon with cuff of bladder mucosa with primary colocolic anastomosis with two layer closure of bladder wall done. Excised specimen shows, Stricture of length 8cm involving sigmoid colon. Postop period was uneventful.

Histopathology shows:

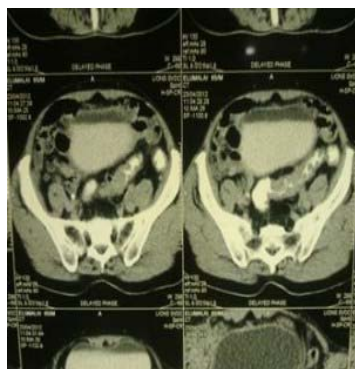
multiple large epithelioid and langhans type giant cells seen in fibrinous background, few lymphocytes and macrophages seen.

Impression:

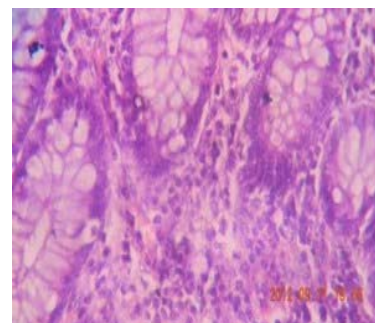
Tuberculous colitis. The patient was put on Cat I ATT(Anti tuberculous drugs) postoperatively. The patient was on regular follow up & doing well.



INTRAOP SIGMOID LESION



**DOUBLE CONTRAST ENEMA
CECT ABDOMEN**

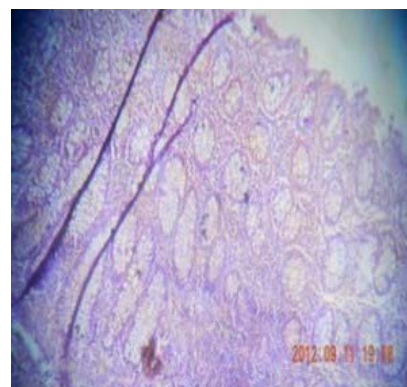


CUT SPECIMEN

HISTOLOGICAL IMAGES



INTRAOP BLADDER SIGMOID ADHESION



DISCUSSION:

Intestinal tuberculosis is a diagnostic challenge, especially in the absence of active pulmonary infection. It may mimic many other abdominal diseases. Tuberculosis of colon forms only 3 to 4% of intestinal tuberculosis¹.

The postulated mechanisms by which the tubercle bacilli reach the gastrointestinal tract are:

- (i) hematogenous spread from the primary lung focus in childhood, with later reactivation;
- (ii) ingestion of bacilli in sputum from active pulmonary focus;
- (iii) direct spread from adjacent organs; and
- (iv) through lymph channels from infected nodes.

Tuberculosis of the ileocaecal region is a common entity². The apparent affinity of the tubercle bacillus for lymphoid tissue and areas of physiologic stasis facilitating prolong contact between the bacilli and the mucosa may be the reason for ileum and caecum being the most common sites of the disease³. Tuberculosis of the colon tends to be segmental and obstructive symptoms dominate.

GI TB manifests as: the ulcerative form (60%), hypertrophic form

(10%) and mass-like lesion

(ulcerohypertrophic, 30%) that mimic malignancies⁴. Ulcerative lesions give rise to fibrous strictures⁵. The patient complains of abdominal pain, diarrhea and intestinal colic, and later on presents with signs of intestinal obstruction. The diagnosis of isolated colonic tuberculosis, quite difficult since there are no specific clinical presentations. Colonoscopic biopsy is a useful diagnostic modality in Colonic tuberculosis^{6,7}. Resection is the treatment of choice since hyperplastic lesions rarely respond to chemotherapy⁸. For isolated tuberculosis of the colon, local colonic resection is adequate.

CONCLUSION:

Primary segmental colonic tuberculosis is a rare condition and poses great difficulty in diagnosis⁹. High index of suspicion, supported by radiological and colonoscopy may lead to a diagnosis⁹. However, definite diagnosis is made by laparotomy followed by tissue biopsy. The standard treatment of choice is *Segmental resection with colocolic anastomosis followed by antitubercular therapy (ATT)*¹⁰.

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