

TUBERCULOSIS OF COLON MIMICKING AS COLONIC MALIGNANCY: A RARE CASE WITH LITERATURE REVIEW**Dr. Gayatri Amit Deshpande^{1*}, Dr. Murtaza A. Akhtar², Dr. Divish Saxena³ and Dr. Anil Kad⁴**^{1,3}Assistant Professor, Department of General Surgery, NKP Salve Institute of Medical Sciences, Digdoh Hills, Nagpur, India.²Professor and Head, Department of General Surgery, NKP Salve Institute of Medical Sciences, Digdoh Hills, Nagpur, India.⁴Junior Resident, Department of General Surgery, NKP Salve Institute of Medical Sciences, Digdoh Hills, Nagpur, India.***Corresponding Author: Dr. Gayatri Amit Deshpande**

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ABSTRACT

Tuberculosis of Colon is a rare entity usually mimicking malignancy. A fifty year old female with vague abdominal pain having a vague lump in right lumbar region is presented as a case report. On the basis of clinical suspicion, the patient was investigated on the lines of colonic cancer. Colonoscopy showed ulcero-nodular lesion in ascending colon with luminal narrowing with endoscopic biopsy giving suspicion of malignancy. Abdominal contrast enhanced computer tomography showed circumferential thickening of ascending colon. Right hemi-colectomy was performed for a mass involving ascending colon with multiple meso-colic lymph nodes. Histo-pathology report was suggestive of tubercular granulomas. Post-operative recovery was uneventful. Patient is asymptomatic after four months of anti-tubercular treatment. We report a case of intestinal tuberculosis involving ascending colon mimicking colonic malignancy.

KEYWORDS: Tuberculosis, Colonic Neoplasm, Abdominal Tuberculosis, Colonic Tuberculosis.**INTRODUCTION**

Majority of cases of extra-pulmonary tuberculosis are Intestinal Tuberculosis.^[1] Terminal Ileum is the most frequently affected part, which is attributed to presence of lymphoid tissue in the terminal ileum and prolonged contact time of luminal contents.^[2] Colonic tuberculosis Constitutes around 2-10% of all gastro intestinal tuberculosis. Due to its rarity and non-specific presentation, colonic tuberculosis often poses a diagnostic dilemma. We report a case of isolated Colonic Tuberculosis involving ascending colon mimicking as malignancy.

CASE REPORT

A fifty year old female presented with dull aching right-sided abdominal pain of six months duration without any associated gastro-intestinal symptoms except loss of weight. Clinical examination revealed an ill-defined, fixed, non-ballotable lump in the right lumbar region approximately 5cm x 5cm in size. Haematological investigations were within normal limits except raised ESR.

Ultra-sonography of abdomen revealed hepatic flexure thickening. Suspecting an ascending colon and hepatic flexure malignancy, colonoscopy was done showing

ulcero-nodular lesion with luminal narrowing (Figure 1). Endoscopic biopsies were suspicious of malignancy. Contrast enhanced computer tomography of the abdomen showed a circumferential thickening of ascending colon wall with luminal narrowing and lymph nodes in peri-caecal, aorto-caval and para-aortic regions (Figure 2).

Exploratory Laparotomy revealed that the lump was arising from ascending colon with mesenteric lymphadenopathy. Right hemi-colectomy was carried out (Figure 3). The histo-pathological examination of the lesion showed epitheloid granulomas with Langhan's cells involving sub-mucosa, muscularis layer and serosa. Peri-colic lymph nodes also showed necrotising granulomatous lesions consistent with tuberculosis. Post-operative recovery was uneventful.

Patient was discharged on tenth post-operative day on four-drug anti-TB therapy of Isoniazid, Rifampicin, Pyrazinamide and Ethambutol in calculated doses for two months followed by three drug regime to be continued for six months. Patient is followed up for four months without any symptoms and has significant weight gain.



Figure 1: Colonoscopic view showing ulceronodular lesion in the ascending colon

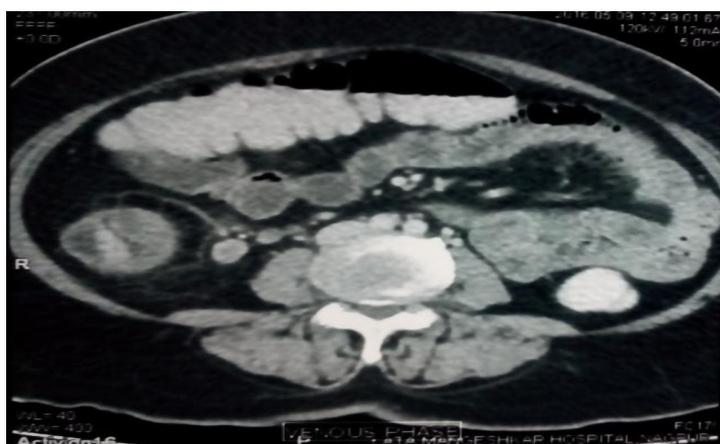


Figure 2: Abdominal computed tomography showing circumferential wall thickening of the ascending colon resulting in luminal narrowing with significant fat stranding and multiple pericolic lymphadenopathy.



Figure 3: Resected surgical specimen showing lesion involving the ascending colon with multiple pericolic lymphnodes.

DISCUSSION

Extra pulmonary tuberculosis occurs in isolation or along with a pulmonary focus. Tuberculosis can involve any organ system in the body. Extra pulmonary tuberculosis is an important clinical problem. Although gastrointestinal tuberculosis is not normally seen in the western world but is fairly common in the Indian scenario and can be a significant source of mortality and morbidity.^[3]

Only 25% patients with gastrointestinal tuberculosis have concomitant pulmonary tuberculosis. Hence, diagnosis of primary gastrointestinal tuberculosis requires a high index of suspicion. Intestinal tract is usually affected by swallowed bacteria or from blood borne spread. Terminal ileum has a higher predilection for tubercular infection due to the presence of higher lymphoid tissue and relatively longer contact time with the bacteria.

Tuberculosis of the colon is rare and only a high index of suspicion could lead to prospective diagnosis, as endoscopic features of colonic tuberculosis are non-specific and mimic inflammatory bowel disease (IBD) or malignancy.^[4,5] This was the scenario in the present case as it was misdiagnosed as colonic malignancy after colonoscopy and ambiguous histopathology.

Weight loss and abdominal pain are the predominant symptoms, seen in 80% cases of colonic tuberculosis. These symptoms were present in our case.

Abdominal mass on examination is observed in 6-40% patients which could be due to associated inflammatory intestinal lesion or enlarged mesenteric lymph nodes.^[6] In our patient, the enlarged mesenteric lymph nodes were found.

Bleeding per rectum is found in 20% of patients with colonic tuberculosis, which was not present in the present case.

On colonoscopy, ulceration and nodularity are the predominant findings in the right colon while strictures are found in the transverse colon.^[2] Presence of nodularity and ulceration in the present case mimicked malignancy. Histopathology in favour of tuberculosis is present in 73% of patients. Histopathology in the present study was inconclusive and was pointing more towards the suspicion of malignancy. Hence, exploratory laparotomy and resection of the affected colon was mandatory.

The patient was put on four drug anti-tubercular therapy which was down sized to three drug after two months of intensive phase which is likely to continue upto 8-9 months depending on the follow up. Four months after therapy, our patient is asymptomatic with significant weight gain without any drug induced toxicity.

CONCLUSION

To summarize, patients of colonic tuberculosis present with non-specific symptoms. Hence, diagnosis even in endemic countries make it difficult solely because of ambiguous report of imaging and histopathology. Hence, need for surgical exploration. Colonic biopsy if turns out to be diagnostic then patients can be treated with anti-tubercular medications without surgical exploration.

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