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Case Report

Primary rectal tuberculosis mimicking malignancy

Sunil V. Jagtap[1]*, Shivani H. Ingale[1], Swati S. Jagtap[2]

[1]Department of Pathology, Krishna Institute of Medical Sciences Deemed University, Karad, India
[2]Department of Physiology, Krishna Institute of Medical Sciences Deemed University, Karad, India

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***Correspondence:**
Dr. Sunil V. Jagtap,
E-mail: drsvjagtap@gmail.com

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ABSTRACT

Primary rectal involvement by tuberculosis infection is rare. We present a relatively uncommon case of primary rectal tuberculosis. A 35-year-old male patient presented with history of long duration of anorexia, altered bowel habits, painful defecation, fever, and rectal bleeding. On clinical and radiological finding case was suspected of rectal malignancy. The proctoscopic biopsy was performed. On histopathology, it was diagnosed as rectal tuberculosis. We are presenting this case for its rarity, mimicking malignancy and difficulty in diagnosis.

Keywords: Granulomas, Gastro intestinal tuberculosis, Rectal growth, Rectal bleeding

INTRODUCTION

Gastro intestinal tract tuberculosis may be of primary or secondary type. Tuberculosis can involve any part of gastro intestinal tract extending from oesophagus to anus. However distal to ileo-caecal involvement by tuberculosis is infrequent.[1] Colorectal tuberculosis is common in developing countries, however its diagnosis is difficult. Many cases the provisional diagnosis was suspected to be malignancy. The histopathology plays important role in final diagnosis and management of such cases.

CASE REPORT

A 35-year-old male patient presented with history of fecal incontinence, pain in abdomen, rectal bleeding and altered bowel habits of 8-months duration. He has given history of anorexia, weight loss, fatigability, fever off and on for 5 years. There was no past history of tuberculosis diabetes, malignancy etc. On clinical examination patient was poorly nourished. He had severe pallor and oedema. No systemic disease was noted. Per abdominal examination was normal. No lymphadenopathy was noted. Routine X-ray chest and abdomen pelvis was normal. Ultrasonography of abdomen was normal. On haematological investigations- Haemoglobin was 5.1 gm%, total leucocyte counts 9800/mm^3, differential leucocyte count was Neutrophils - 48%, Lymphocyte - 50% and Eosinophils -2%. Erythrocyte sedimentation rate was 110 mm at the end of 1 hour. the ELISA -HIV was reactive. His per rectal examination showed rectal growth. Barium enema showed a 4 cm growth which was 5 cm away from anal verge.

Proctoscopy showed rectal mass measuring approximately 4x 2.5 cm, which were bleed on touch. Clinically case was suspected of rectal malignancy. Biopsy was taken which showed rectal wall with multiple granulomas composed of epithelioid cells giant cells, caseous necrosis, lymphocytic infiltration and Ziehl Neelsen's stain revealed numerous acid fast bacilli (Figure 1, Figure 2) so diagnosis of tuberculosis of rectum was given. Patient was given anti Koch's treatment (AKT). On follow up showed well response we to treatment.

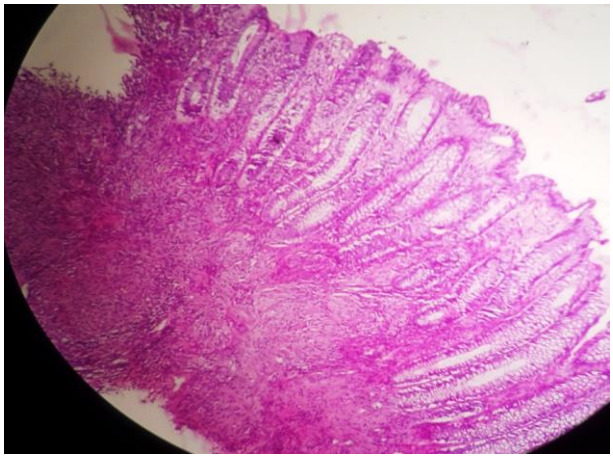

Figure 1: Photomicrograph showing wall of rectum with granuloma formation (H and E stain, 40x).

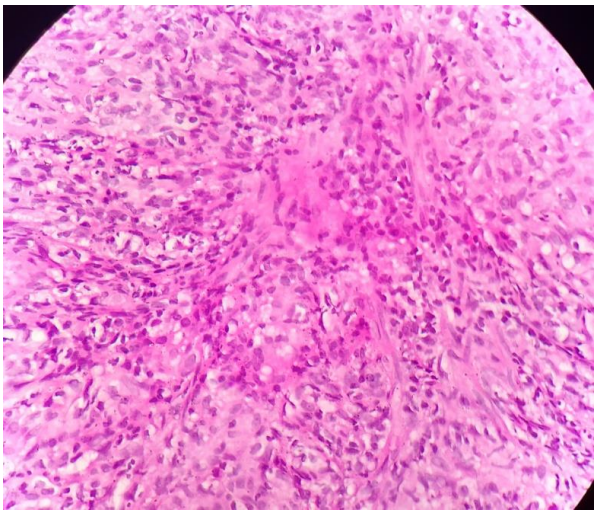

Figure 2: Photomicrograph showing granuloma formation with chronic inflammation in rectal wall (H and E stain, 100x).

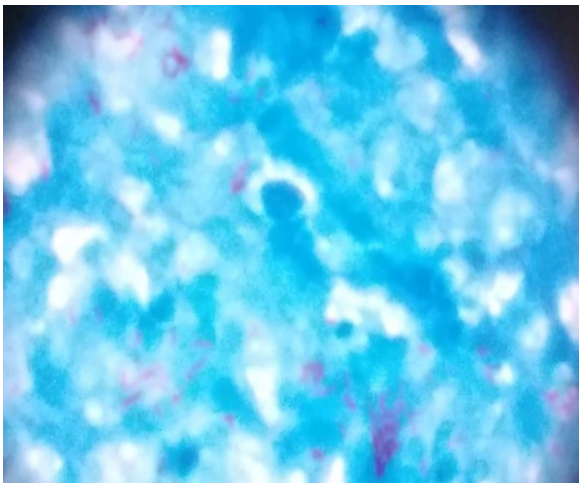

Figure 3: Photomicrograph showing rectal wall with numerous acid fast bacilli (ZN stain, 100x).

DISCUSSION

The tuberculosis is a major health problem worldwide and it still remains so.[2,3] Overall one third of world's population is infected with the tuberculosis bacilli.[4] Extrapulmonary pulmonary tuberculosis can affect any organ of body. Gastro intestinal tract tuberculosis can be primary or secondary. However only <1% of cases of all sites taken together that involves GIT tuberculosis form.[5,6] It may involve any part of the gastrointestinal system, such as the peritoneum, stomach, duodenum, ileo-caecal region, colon, rectum, and anus. The involvement of primary rectal tuberculosis is rare. Clinically rectal tuberculosis cases present with haematochezia most commonly, other symptom like constipation, fever, altered bowel habits, weight loss etc.[7] It is difficult to diagnose as many conditions like Chrohn's disease, rectal malignancy, and other granulommatous lesions mimic's it.

The various morphological form of rectal tuberculosis are ulcerative, hyperplastic, verrucose, milliary, lupoid has been noted.[8] Cases presented with tuberculous fistula in ano has been reported.[9]

Our case showed ulcerative nodular growth pattern. On biopsy showed granulomatous inflammation. Ziehl Neelsen's stain revealed numerous acid fast bacilli. As tuberculosis cases are increasing with epidemic of HIV, appearance of multidrug resistant bacilli, large immigrant population, careful evaluation of these case is important. Despite availability of several tests, early diagnosis of anal and perianal tuberculosis remains a challenge. Clinical diagnosis is usually dependent on microscopic findings and detection of causative organisms by using Ziehl-Neelsen's stain and mycobacterial culture. The rectal tuberculosis is unexpected in our case as it was mimicking malignancy on a clinical and radiological background. Histopathology played important role in final diagnosis. The patient was treated with anti-Koch's treatment and responded well.

CONCLUSION

In absence of pulmonary tuberculosis, diagnosis of primary tuberculosis is unexpected and difficult as it mimics malignancy. Histopathology and microbiological examination is important to diagnose and treat these patients.

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