Appendicular Mass in a Patient of Ileocaecal Tuberculosis

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Abstract
Tuberculous appendicitis being rare, with incidence of 0.1% - 0.3% should always be confirmed by histopathology and bacteriology. Reporting a case of chronic appendicitis which was finally diagnosed as tuberculous serositis of appendix producing an appendicular mass.

Introduction
In recent years tuberculosis has been merged as an important disease in developing as well as developed countries, especially with rising incidence of HIV infection. Abdomen is one of the common sites of extrapulmonary tuberculosis. Majority of patients do not have associated or antecedent pulmonary tuberculosis. Although ileocaecal tuberculosis is the commonest presentation of abdominal tuberculosis. Isolated lesion in the terminal part of ileum spreading via the lymphatics to produce tuberculous serositis of appendix is seldom found. However appendicular involvement is found to be distinctly uncommon even in the set up of ileocaecal tuberculosis.\textsuperscript{3,5,12} We present a case of tuberculous serositis of appendix in presence of ileal tuberculosis.

Case Presentation
A 36 year male, married technical worker by occupation, complaint of pain in abdomen since 8 months, with mass in right ileac fossa. Loose stools alternating with constipation.

Past history: pulmonary tuberculosis at the age of 11 years, pulmonary pleural effusion there after treated by AKT. Operated for haemorrhoids a year back, initially treated for mass in right ileac fossa with antibiotics, which resolved but pain persisted.

Patient came to surgical OPD of Mumbadevi Homoeopathic Hospital for pain in right ileac fossa.

On examination patient as a person - average built, no lymphadenopathy, icterus, pallor, clubbing of nail, afebrile.

Per abdomen - soft tenderness of right ileac fossa, liver and spleen are not palpable.

Investigation
1) Basic haematological investigation were normal.
2) X-ray chest : old fibrotic scar right upper and mid zone.

Surgeon’s opinion was chronic appendicitis, patient was taken up for surgery, on exploring, the terminal part of ileum showed constriction with dilatation of saccular type, resected with end to end anastomosis. Simultaneously appendix was explored and resected. Post operative recovery was eventful.

Tissue sent for histopathology.

Grossly : Ileum showed constriction at both ends and with sac like dilatation in the centre.

Cut section : Showed hypertrophy pseudopapillae at the constricted ends.

Grossly : Appendix serosa congested shows fibrinous exudate on surface, 4 cm long.

Cut section : Lumen narrowed, wall thickened oozing of serosanguinous thick fluid. Microscopically : ileum showed attempting characteristic epitheloid

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granuloma with tubercular inflammatory cells. Serosa of appendix showing serositis of tubercular origin. Mucosa was normal, no granulomatous lesion seen. Imprint smear, stained by ZNCF (cold method) demonstrated the presence of acid fast bacilli from hypertrophic pseudopolypoidal mass.

Discussion
Tuberculosis is a common disease in our country affecting people of all age groups and different organ system.

Abdominal tuberculosis accounts for 0.8 - 10% of all hospital admission. In adults gastrointestinal tuberculosis accounts for 2/3rd of abdominal tuberculosis. In children however the involvement of peritoneum and lymphnode is more common than gastrointestinal tuberculosis. In children however the involvement of peritoneum and lymphnode is more common than gastrointestinal tuberculosis.² 85-90% patients have tuberculosis affecting caecum.

Secondary involvement of appendix from ileocaecal tuberculosis is also uncommon and varies from 1.5 - 3.0% cases.⁵,¹¹

Multiple sites⁷ in the same patient may be involved and our case is a good example of involvement of GIT may occur in absence of any discernible tuberculous lesion in chest X-ray but in our patient had a past history of pulmonary tuberculosis with pleural effusion, patient also showed evidence of nodular stricturous as well as pseudopolypoidal lesion (hypertrophied tubercular polyps). The patient did give history of appendicular which resolved by antibiotics (macrolide, aminoglycoside, quinolones) which very well explains that initial process of forming an appendicular mass could also be tubercular in origin with secondary infection and because of lack of competent immune system response as well as short course of antibiotic therapy caused a relapse of the disease process. Other possibility could be that there is a minimal contact of appendicular mucosa with intestinal contents. The probable mode of infection could be intraluminal that extending via the lymphatics to the appendix.

There are three clinical types of tuberculous appendicitis which have been described in the literature.⁵ The first type present as an acute form, indistinguishable from pyogenic appendicitis, until histopathologically proved. The second clinical type is a chronic form, presenting with vague pain, vomiting, diarrhoea, and a mass in right ileac fossa. The third type is a latent one found accidentally on histopathology examination, our case report appears to be in the second clinical setting.

Differential diagnosis from other condition such as Crohn's disease, lymphoma may at times, however be difficult even with experienced observer.⁹¹² In such cases the clinical presentation of the patient and response to treatment aids final diagnosis assume greater importance

In our case we considered a final diagnosis of tuberculosis in preference over Crohn's disease¹² because of several points. First of all Crohn's disease is rare in India. Secondly features such as fissures, fistula and abscesses were never encountered throughout the
illness and during follow up.

The presence of granuloma with Langhan’s cells, epitheloid cells and dramatic response of the patient to AKT is also suggestive. Tuberculosis is endemic particularly in India, isolated tuberculous lesion may or may not be associated with specific signs and symptoms, so the diagnosis is often made only after histopathology and by imprint smear bacteriologically. Therefore it is strongly suggested to have multiple sections of all surgically removed appendix and sent for histopathology and imprint smear for acid fast bacilli in order to prevent misdiagnosis.

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