Appendicular Tuberculosis

Ganesh K Bakshi*, KS Kumar*, Sadanand V Shetty**, Amita Joshi***

Abstract
Tuberculosis of appendix occurs as primary or secondary disease, the former being rare with incidence of 0.1% to 0.6%.

The pathogenesis of this isolated lesion is not clear and presentations are varied. A high index of suspicion and great clinical acumen is required for preoperative diagnosis, which should always be confirmed by histopathology. Appropriate treatment includes appendicectomy with postoperative antitubercular chemotherapy. Tuberculosis being endemic in our country, it is a must to send all appendicectomy specimens for histopathology examination, so as to prevent misdiagnosis and prevent further complications.

Introduction
Although ileocaecal tuberculosis is the commonest presentation of abdominal tuberculosis, isolated appendicular involvement is seldom found. The pathogenesis of this isolated lesion is not clear and unless histopathological diagnosis of resected specimen is asked for, the true diagnosis is likely to be missed.

Case Report
A 9 yr old boy, presented with history of recurrent pain in right iliac fossa, since 3 months. He didn’t have any urinary complaints. His haematological investigations were in normal limits, X-ray chest didn’t show any abnormality. Barium meal follow through was normal. Patient was advised to undergo elective appendicectomy. The specimen of appendix was 6 cm long and showed signs of appendicitis. Tubercles on appendix, mesenteric lymphadenopathy or ascites were not seen. Routine appendicectomy was done and specimen sent for histopathology, which revealed tuberculous appendix. (Fig. 1).

Discussion
Tuberculosis of the appendix, secondary to the disease of ileocaecal region, female genitalia or lung is already well known, but cases of localized infection of the appendix...
are rare. The incidence of isolated tuberculosis of appendix varies from 0.1% to 0.06%.\textsuperscript{1,2} Only 3 cases of tubercular appendicular disease were found amongst 102 cases in a study of gastrointestinal tuberculosis.\textsuperscript{3}

Tuberculous appendicitis, although being a disease of young adults, average age being 30 yrs, has shown a wide variation in the age incidence from 9 months to 62 years. It has greater incidence in women than in men.\textsuperscript{4} However, our patient is a 9 yr old boy. Three types of presentations have been described as a chronic type, an acute onset type and an incidental type. The other manifestations are in association with ileocaecal or ileal tuberculosis, or visceral tuberculosis and tuberculous periappendicitis. The route of infection may be haematogenous, from infected gut contents or externally from neighbouring viscera.\textsuperscript{1,5} The tuberculous appendices have also been described as ulcerative or hyperplastic; ulcerative type being more common. The gross appearance may vary from normal or thick walled appendix, very large appendix, a mass in which the absence of tuberculosis elsewhere in the body and of other pathologic foci at laparotomy may conclude the diagnosis of primary tuberculous appendicitis.\textsuperscript{5} Our patient fits in this group. Preoperatively, there was no suspicion of tuberculosis. Earlier surgeons, have provisionally diagnosed tuberculosis preoperatively in 3 out of 70 cases of appendicectomy showing classic granulomas on histopathology.\textsuperscript{6} Some pathologists suggest the study of more than 2 sections of each appendix for histopathological examination, so that more cases would be detected in endemic areas.\textsuperscript{6}

Tuberculosis is a systemic disease with localized manifestation and complications such as sinus\textsuperscript{5} or fistula formation may occur. Hence it is advisable to administer antitubercular therapy in postoperative period.\textsuperscript{7} However some don’t agree to this when isolated disease is found.\textsuperscript{4}

Tubercular disease is endemic, particularly in India and hence it is advisable to send every appendicectomy specimen for histopathological examination. This will prevent misdiagnosis, prevent complications and ensure complete care of the patient.\textsuperscript{8}

References