PRIMARY TUBERCULOUS APPENDICITIS

(A Case Report)

Lt Col TS VASAN^{*}, Lt Col VK KUMAR⁺

MJAFI 1998; 54 : 264-265

KEYWORDS : Appendix; Tuberculosis.

Introduction

Tuberculosis affects all organs in human body. Gastro-intestinal (GI) tuberculosis is relatively common and appendix may be involved uncommonly secondary to intestinal tuberculosis. Among 102 patients of GI tract tuberculosis only 3 cases of tuberculous appendicitis were found [1]. Most of these cases may be suspected at laparotomy with evidence of peritoneal tuberculosis. Rarely a patient may present with only features of acute appendicitis and histopathological examination (HPE) of the removed appendix, may show features of tuberculosis hitherto unsuspected.

Case Report

A 16-year-old unmarried girl, apparently healthy two days before, presented with features of pain in right lower abdomen, vomiting, fever and constipation. There was no past history of any prolonged or major illness. On examination, she was found to be mildly obese and febrile with no pallor or lymphadenopathy. Examination of abdomen revealed rebound tenderness and guarding in right iliac fossa. Examination of blood showed total leucocyte count of 13,000 cells/cu mm, Hb-12g%; routine examination of urine was normal. Plain radiograph of chest and abdomen were normal.

She was taken up for surgery as a case of acute appendicitis.

Fig. 1 : Appendix with tubercular granuloma

On opening the peritoneum, appendix was found to be matted with part of omentum. Also the appendix was found perforated at the base. Appendicectomy was performed and diseased omentum was excised. Routine examination of caecum, ileum and mesentery of small intestine showed no abnormality. She made uneventful post-operative recovery. The specimen of appendix was found to be turgid, highly inflamed and purple in colour. HPE of appendix showed multiple tuberculous granulomas in the wall of appendix (Fig 1). Acid fast bacilli were not demonstrated.

Investigations were done post-operatively to rule out intestinal tuberculosis. Barium meal follow through examination was normal and erythrocyte sedimentation rate was 18 mm fall in the first hour. Patient was started on anti-tuberculosis treatment regimen (ATT) with streptomycin, rifampicin, INH and pyrazinamide. On completion of six months of ATT, patient remained symptom free.

Discussion

Tuberculosis is as old as human civilisation and is a major health problem in India. Tuberculosis of vermiform appendix is an uncommon entity and is usually secondary to tuberculosis elsewhere in the body, specially in ileo-caecal region. Commonly, patient has telltale evidence of the disease in lung, ileum or peritoneal cavity. Frequent method of spread is by swallowing own infected sputum or contaminated food items. Appendix becomes the focus of infection possibly by retrograde lymphatic spread from infected foci in ileum.

Isolated tuberculosis of appendix may remain silent, or present with features of ileo-caecal or peritoneal tuberculosis [6]. In this patient tuberculosis remained unsuspected even at laparotomy. Superadded secondary bacterial infection due to obstruction caused by tubercles in the wall of appendix, was probably the cause of obstructive appendicitis in this case. The diagnosis would have been missed if the appendix specimen was not sent for routine HPE.

It has been advocated that the treatment for tuberculous appendicitis is appendicectomy apart from antituberculosis drugs therapy [6]. However, in cases of tu-

^{*}Classified Specialist (Surgery), 305 Field Ambulance, C/o 99 APO; ⁺Classified Specialist (Pathology), Command Pathology Laboratory, (Southern Command), Pune 411 040.

berculosis with ascites or in plastic form of tuberculous peritonitis or with matted coils of intestine, routine appendicectomy may be harmful. It is desired that in suspected cases, one should start antituberculosis drugs in the post-operative phase, after appendicectomy, to prevent any local complications.

REFERENCES

1. Vaidya M, Sodhi J. Gastrointestinal tuberculosis: A study of 102 cases including 55 hemicolectomies. *Clin Radiol* 1978; 29: 189-95.
2. Singh M, Arunabh V, Kapoor V. Tuberculosis of appendix. A report of 17 cases and a suggested aetiopathological classification. *Postgrad Med J* 1987; 63: 855-7.
3. Gupta SC, Gupta AK, Keswani NK, Singh PA, Tripathi AK, Krishna V. *J Clin Pathol* 1989; 42 (Nov): 1169-72.
4. Muruli VP, Divakar D, Thachil MV, Raghu CG, Jacob MG. *J Indian Med Assoc* 1989; 87 (Jul): 162-3.
5. Al Hilaly MA, Abu Zidan FM, Zayed FF, Suleiman JD, Farid LS. Tuberculous appendicitis with perforation. *Br J Clin Pract* 1990; 44 (Dec): 632-3.