CASE REPORT

Primary Tubercular Appendicitis Masquerading as a Twisted Ovarian Cyst

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Abstract

We report a rare case of primary tubercular appendicitis diagnosed incidentally on histopathological examination of a surgically resected appendix in a 28 year old women who underwent laparotomy for a clinically suspected diagnosis of twisted ovarian cyst.

Key Words

Ovarian cyst, Tuberculosis, Appendix.

Introduction

Tuberculosis of appendix is a rare disease accounting for 0.6% of all surgically removed appendices(1). Primary tuberculosis of the appendix with no detectable tubercular focus elsewhere is even rarer. We present such a rare case of primary tubercular appendicitis

Case Report

Mrs. EJ a 28 year old female, Para 2, presented to the emergency services of AIIMS Hospital with a history of acute pain in lower abdomen of 8 to 10 hours duration with gradually increasing in intensity and not relieved by analgesics. There were no other associated bowel or urinary symptoms. Her menstrual cycles were regular with average flow and she had her last menstural period 15 days ago.

Physical examination revealed a young woman in severe distress due to lower abdominal pain. Her body temperature was 98.20F, pulse rate 98/minute and blood pressure was 110/70 mm Hg. On abdominal palpation, tenderness was elicited in hypogastric region and right illiac fossa but there was no rigidity or guarding. Bowel sounds were present. Bimannual pelvic examination revealed a 8 × 8 cm tender cystic mass in right fornix, while uterus was normal in size and left fornix was free. Her urine for pregnancy test was negative, Ultrasound examination showed a large multi loculated cystic mass with mixed echogenicity in relation to right and posterior surface of uterus. There was no free fluid in pouch of Douglas. Left adenexa and uterus were normal. Right adnexa could not be visualised separately. With a suspected clinical diagnosis of twised ovarian cyst she was taken up for emergency laparotomy.

Intra-operatively we found that loops of small bowel were adherent to the fundus of the uterus, on releasing the adhesions thick pus came out. Appendix was adherent to the posterior surface of uterus, on releasing appendix it was found to be congested with no obvious perforation. Both tubes and ovaries were congested and partly adherent to the posterior surface of the uterus. Appendectomy with peritoneal lavage was performed. Rest of the intestine along with caecum appeared normal. Histopathological examination of the appendix showed granulomatous inflammation alongwith areas of

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necrosis with giant cells and a heavy transmural lymphocytic infiltration suggestive of tuberculosis of the appendix (Fig. 1). On receiving the histopathological examination, a chest x-ray was performed, which did not reveal any abnormality. Post operatively patient received anti tubercular therapy for 6 months duration.

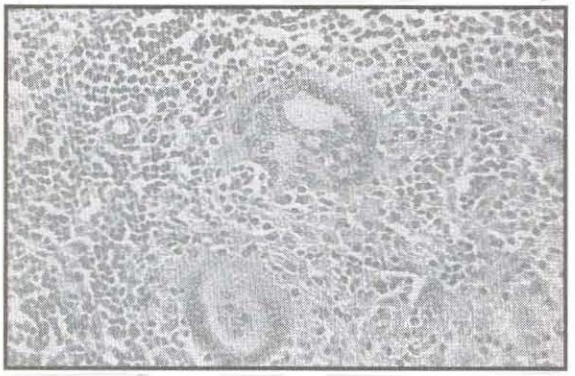

Fig 1: Mucosa of appendix showing a tubercle with giant cell formation.

Discussion

Tubercular appendicitis is a rare condition, occasional case reports have appeared in literature from time to time. Shah and colleagues reported 10 cases of tubercular appendititis over a period of 10 years (1). Dymock *et. al.* reported 2 cases of tubercular appendicitis in an analysis of 1000 appendicetomy specimens (2).

Primary tuberculosis of appendix with no detectable tuberculous focus elsewhere is rare. Clinically primary involvement of appendix is considered when there is no evidence of tuberculosis anywhere in the body after thorough investigations including laparotomy. The appendix is more commonly involved in tuberculosis secondary to the involvement of the ileo-caecal region. Secondary tuberculosis of appendix is also uncommon. Shah *et al* reported 20 cases of Ileo-caecal tuberculosis, none of them showed involvement of appendix. This might be attributed to the minimal contact of the appendix with the intestinal contents.

Although there may be wide variations in the age incidence, tuberculous appendicitis is usually a disease of young adults, the average age being about thirty. The infection of appendix by tuberculous bacillus can occur by one of the three ways (1) extention from ileocaecal or genital tuberculosis (2) haematogenous spread from a distant focus (3) direct contact with infected intestinal contents due to ingestion of food contaminated with tubercle bacilli.

Clinically tuberculous appendicits may manifest as an acute or chronic disease. It may also remain in a latent or asymptomatic form. The chronic form is more common than the acute form, and usually presents as intermittent episodes of low grade fever, abdominal pain associated with diarrhoea and vomitting, there may be localised tenderness and rigidity of lower abdomen. The patient may have been experiencing these attacks for several years and they are due to mild secondary infection of the tuberculous ulceration, unless this condition is diagnosed and treated, however an acute episode will eventually appear and it is indistinguishable from the usual form of suppurative appendicits and this due to severe pyogenic infection superimposed on the tuberculous appendix. Sometime the acute form of is disease will appear with no previous history suggestive of tuberculous appendicitis. The latent or asymptomatic form is discovered in appendices removed routinely in the course of some other abdominal operation.

The diagnosis is usually made following histopathological examination of surgically removed appendix. Surgery is the main stay of the treatment followed by antitubercular therapy. Surgery is advocated as the treatment of choice for tuberculosis of appendix because the anti-tuberculous drugs alone can not control recurrent attacks of inflammation (3). Anti tubercular drugs are advocated along with surgery to control the local complications such as sinus formation (4).

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