

Measles is a totally preventable disease. In view of large number of children developing measles and its potentially life threatening complications in our country, it is further emphasized to strengthen the measles immunization programme. Till then early recognition and prompt medical intervention of postmeasles complications remain the only modality to cope up with this vaccine preventable disease.

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Unusual Presentation of Tuberculous Peritonitis

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Spontaneous primary peritonitis (SPP) is an infection of the peritoneal cavity without demonstrable intra abdominal source(1). Impaired immunological status

as in protein energy malnutrition, nephrotic syndrome, and cirrhosis of liver may predispose to development of the condition. We describe a case of tuberculosis presenting with acute peritonitis.

Case Report

A 7-year-old girl was admitted with fever, pain abdomen and cough of four days duration. Clinical examination showed a malnourished, febrile, and toxic child. Generalized lymphadenopathy involving cervical, axillary and inguinal groups was present. Abdominal examination revealed distension, tenderness, guarding, non tender hepatomegaly (5 cm), splenomegaly (1 cm), evidence of free fluid, and exaggerated peristaltic sounds. Investigations showed hemoglobin 10 g/dl; total leucocyte count-12600/cu mm, polymorphs 85%, positive cocci, on Gram stain, and culture grew *Staphylococcus aureus*. A clinical diagnosis of bacterial peritonitis was made. Other investigations revealed a negative Mantoux test, X-ray chest showed miliary mottling, X-ray abdomen showing multiple fluid levels.

The case was managed with injection cloxacillin, gentamicin, and metronidazole (100 mg/kg/day; 5 mg/kg/day; 5 mg/kg/dose, respectively) and parenteral fluids. However, clinical signs deteriorated with increasing abdominal distension, absent bowel sounds, and persistent multiple fluid levels on X-ray abdomen despite 72 h of

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therapy. This prompted abdominal exploration. The intra abdominal findings included turbid ascitic fluid, mesenteric lymphadenopathy normal appendix, and no strictures or perforations. Peritoneal toileting was done.

The post operative course was uneventful and the child recovered over the next two weeks. The therapy was changed to include anti tubercular drugs (injection streptomycin, isoniazid, rifampicin). Histopathology of mesentric lymph node and peritoneum confirmed tuberculosis.

Discussion

Spontaneous primary peritonitis can be diagnosed in the presence of ascitic fluid polymorph count more than 250 cells/cu mm, positive culture, and absence of primary source of infection(2). In a study over a period of 10 years, Narasimarao *et al.*(3) diagnosed 26 cases of spontaneous primary peritonitis (22%) out of 118 cases of generalized peritonitis. Further, in a review of tubercular peritonitis over a 6 year period in Kandy (Sri Lanka), the incidence was 1.5% with a maximum incidence in the age group 21-40 years, clinical features were non specific and included fever, abdominal pain and distension, and ascites. The onset was insidious and all presented with chronic symptoms(4). Rarely, tubercular peritonitis may present acutely mimicking acute abdomen. Such reports are rare and the diagnosis in all these three cases were established on laparotomy(5,6).

Difficulties in diagnosis of spontaneous primary peritonitis due to tuberculosis can arise in an illness of short duration which mimics an acute abdomen. Investigations including blood counts, Mantoux test, X-rays, and ascitic tap may not help in establishing the diagnosis of tuberculosis. Confirmation is possible only by exploratory

laparotomy and histology. This rare report indicates that tuberculosis may present as spontaneous primary peritonitis. Possibly immunological aberrations including ineffective phagocytic activity of polymorphs and macrophages in the ascitic fluid and low levels of complement, immunoglobulin, fibronectin and opsonins increase the risk of spontaneous primary peritonitis. Presence of these abnormalities in a malnourished child could explain the genesis of this condition in tuberculosis. This report further illustrates the need for instituting timely diagnostic procedures including exploratory laprotomy. Adequate therapeutic measures can reduce the morbidity and mortality in this condition.

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