Primary Peritoneal Tuberculosis

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Abstract
28 year old married housewife P3L2, day 18 of normal delivery was referred in view of loose motions. On abdominal examination guarding, rigidity, tenderness and ascites were present. Vaginal examination findings were normal. Diagnostic tapping of peritoneal fluid was done and 10 ml of white thick pus was aspirated. On exploratory laparotomy uterus was 8 weeks, both ovaries and tubes were normal, no source of abscess could be identified. Pus was sent for culture, sensitivity and ADA levels. ADA levels were raised. Patient was started on 4 drug AKT.

Case Report
Mrs. AB 28 year old married housewife belonging to low socioeconomic family G6P3A3L2, Day 18 of full term normal delivery was referred from casualty in view of loose motions.

On examination her general condition was fair, afebrile, pulse 110/min, regular, low volume, BP 100/70 mmHg, RS clear, CVS S1S2 normal. On abdominal examination guarding, rigidity, tenderness and ascites were present. Bowel sounds were present. On vaginal examination uterus was of 8 weeks size soft, mobile, no fornical tenderness or mass felt and external os was closed. On cervical movement tenderness was elicited.

Ultrasonography was done which revealed ascites, few dilated loops, hyperperistaltic small bowel loops and presence of free fluid in the pelvis. Diagnostic tapping of peritoneal fluid was done and 10 ml of white thick pus aspirated. Provisional diagnosis of ruptured abscess was made. Aspirated peritoneal fluid was sent for biochemical analysis which showed protein content of 4.654 gm%.

In view of pyoperitoneum a decision of exploratory laparotomy was taken. On exploration uterus was 8 weeks, both ovaries and tubes were normal, no source of purulent discharge could be identified. Bowel tracing was done by surgeons, there was no evidence of perforation. Pus was sent for culture, sensitivity and ADA levels. ADA levels were raised i.e. 110 IU/ml. The reported cutoff value for ADA (total) varies from 47 to 60 U/L.1

Intrapерitoneal portex drain was placed in the right paracolic gutter and cul de sac. The abdomen was closed after giving good peritoneal lavage. Peritoneal lavage given after exploration ensures better healing (Krukowski and Matheson 1983).2 Postoperatively patient was started on injection cefotaxime, amikacin and metronidazole. Drain was removed after 5 days and sutures were removed on day 7. We started the patient on 4-drug AKT constituting rifampicin, INH, ethambutol and pyrazinamide in view of raised serum Adenosine deaminase levels. Pus SCABS report came as no growth i.e. Smear culture and antibiotic culture sensitivity test. Patient was started on T. imipramine and zapiz in view of mixed anxiety depression.

Discussion
Primary peritonitis is a rare condition occurring by definition, in patients without any underlying cause such as perforated viscus, preexisting ascites or nephrosis.

Review of the world literature shows predilection for women to have this condition. The entry site could be asymptomatic genital tract colonisation. Shock or toxic shock syndrome often accompany the abdominal findings.3

Primary peritonitis refers to inflammation of peritoneal cavity without documented source of infection. The incidence quoted is around 4 to 5%.4 It is more common in

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females, children and immunocompromised patients. Primary peritonitis is also referred to as spontaneous bacterial peritonitis and the most common organisms responsible are, haemolytic streptococci, pneumococci, haemophilus, E-coli, klebsilla, clostridium welchi and staphylococci in that order.

One of the presentation of tuberculous peritonitis is persistent and exudative ascites. Rodriguez found a primary site of tuberculous infection in only 10% of the patients out of 14 patients of tuberculous peritonitis.⁵

Pus sent for smear showed no organisms either on gram staining or on acid fast staining. There was also no growth of any organism on culture media.

As in our patient primary diagnosis was made as primary peritonitis as no lesions identified on intraabdominal or pelvic viscera. However ADA level of ascitic fluid was elevated, diagnosis of tuberculous peritonitis was made.⁶ Whenever no organisms can be identified from pus or no organism from pus grow on culture media diagnosis of primary tuberculous peritonitis should be kept in mind.

References