Introduction
Tubercular infection can involve the chest as well as many parts of the human body, namely the abdomen, peritoneum and bowel. Although the entire gut can be involved, the ileocecal area is most commonly affected.[1 - 3] Abdominal tuberculosis (TB) is the sixth most frequent extra-pulmonary location.[3-4] There are several complications involving intestinal TB, including bowel obstruction (51.7%), intestinal perforation (4.9%), enterocutaneous fistula (2.4%), and small bowel volvulus resulting from mesenteric lymphadenitis (2.4%).[5] Different studies typically denote different percentages for these complications.[6] Free intestinal perforation is an uncommon complication of intestinal TB due to a reactive thickening of the peritoneum and subsequent adhesion formations with surrounding tissues.[7] It accounts for 1-10% of abdominal TB cases and has a poor prognosis unless managed efficiently.[8-10] We report a case of a free tubercular perforation of the ileum with its atypical presentation.

Case Report
A 26 yearold man presented with pain abdomen since 1 day, associated with vomiting. On examination, he was emaciated and afibrile. Per abdomen there was localized guarding and rebound tenderness in the right iliac fossa. ESR and total counts were raised more of lymphocytic type. USG abdomen was not suggestive of any tenderness in the right iliac fossa. ESR and total counts were raised more of lymphocytic type.

Discussion
There are three main pathological forms of tubercular enteritis: 1) ulcerative, 2) hypertrophic, and 3) ulcerohypertrophic.[11] The ulcerative form of the disease is more common than the others, but these ulcers rarely perforate.

Clinical presentation can be acute, chronic, or both acute and chronic. In the majority of cases, constitutional symptoms are present, including fever (40-70%), pain (80-95%), diarrhea (11-20%), constipation, alternating constipation and diarrhea, weight loss (40-90%), anorexia, malaise, ascites, abdominal distension, night sweating, and hematochezia.[12 - 14] In India, around 3-20% of all cases of bowel obstruction are due to tuberculosis.[15].

Uncommonly, the presentation may be like an acute abdomen, which may be due to rupture of a caseous lymph node, GI perforation,
Fibrosis and the formation of adhesions to adjacent intra-abdominal organs account for the low incidence of perforation seen in tuberculosis.[11, 17] Although it is well documented that the incidence of perforation in patients with intestinal tuberculosis varies from 1% to 11%, the majority of these perforations (70%–80%) are not true perforations of such tubercular ulcers, but are 'blow outs' of the small bowel secondary to distension due to distal obstruction (strictures or adhesions). As such, true or 'free' perforations are rare, and only a few cases have been reported to the present in the world literature, with an overall mortality rate of nearly 70%. Recently, vasculitis of the mesenteric vasculature due to tuberculosis has been implicated as a contributory factor, but the exact mechanism by which some patients develop perforation and others is not established.[17 - 19] In any case, intestinal perforation caused by primary abdominal TB is relatively rare.[20]

In such a situation the association of tuberculosis with HIV infection should be considered and patients must always be screened for HIV infection.

Laparoscopy is a very useful investigation in doubtful cases. Visual appearances have been found to be more helpful than histology, culture, or guinea pig inoculation.[21] The laparoscopic findings in peritoneal tuberculosis can be grouped into three categories: (1) thickened peritoneum with tubercles, (2) thickened peritoneum without tubercles, and (3) fibroadhesive peritonitis with markedly thickened peritoneum and multiple thick adhesions fixing the viscera.

Laparotomy is better performed under empirical cover of antibacterial drugs for about 2 weeks, wherever feasible. The general condition of the patient, the number of perforations, the condition of the intestine, and surgeon's experience define the operative procedure, prognosis and outcome. Many of the published papers do not include the description of the methods used to treat the perforation and many of the treatment outcomes are not studied. Primary closure of the perforation can be considered safe if the patient has presented early and the bowel is healthy, otherwise, exteriorization of the affected bowel as a loop ileostomy is a safer option. If there is a long segment of bowel that is diseased, or there are multiple perforations, resection with either primary anastomosis or exteriorization may be considered.[22] Once biopsy confirms the diagnosis of tuberculosis, anti-tubercular therapy is mandatory.

References