Primary intestinal tuberculosis

A 51-year-old woman came to our hospital with sudden abdominal pain. She reported a histological diagnosis of Crohn’s disease (CD) and recurrent bronchopneumonias, the last one positive to the Mantoux intradermoreaction despite the chest radiograph was negative with regard to pulmonary tuberculosis. Clinical examination revealed pain on abdominal palpation, no peristalsis, and a positive Blumberg sign. Abdominal radiograph showed small bowel distension and predominantly right-sided gas-fluid levels. CT yielded a 20-cm segment of thickened walls of the terminal ileum. There were also distortion of ileocaecal junction, mesenteric stranding, and iliac and lumboaortic adenopathies, the latter aggregated with areas of necrosis. Considering the patient’s clinical history, a diagnosis of intestinal obstruction in CD was made. After an initial improvement, her abdominal pain got worse and she underwent intestinal resection. The post-operative histological examination suggested the presence of intestinal tuberculosis. A revision of the surgical specimen confirmed the diagnosis of primary intestinal tuberculosis.

Discussion:

Primary intestinal Tuberculosis (PITB) is a rare variant of the disease in Europe, accounting for 1% of the cases and more common between 25 and 45 years of age. The abdomen is the fourth most common site of involvement in extrapulmonary tuberculosis after lymph nodes, skeletal system and genitourinary tract. The bowel involvement can be primary, due to ingestion of bacilli, or secondary to spread from other organs, especially the lungs. Primary intestinal disease is more common than secondary; in fact, less than 50% of patients with intestinal lesions have coexisting pulmonary disease. Although the entire gastrointestinal tract can be involved, including the peritoneum and the pancreatobiliary system, the most common site of intestinal tuberculosis is the ileocaecal area (90%), usually with involvement of both the terminal ileum and the caecum. The clinical presentation of the disease can be acute or chronic and the most common symptoms are abdominal pain (80-95%), weight loss (40-90%), fever (40-70%) and other intestinal disorders, such as abdominal distension, diarrhoea and constipation. Most common complications of PITB are intestinal obstruction and perforation. The gold standard for the diagnosis of PITB is the presence of Mycobacterium tuberculosis in the biopsies taken by endoscopy. CT can be helpful in visualizing changes of the bowel wall, peritoneal thickening, strictures, occlusions, ascites and enlarged lymph nodes. After iv administration of contrast medium, a homogeneous contrast enhancement, known as
gray pattern, is described. The mural thickening is typically concentric, symmetric and associated with luminal narrowing. The lesions tend to be transmural and intensely desmoplastic with fibrous tissue. Despite all these techniques, the diagnosis of PITB remains challenging, especially in the absence of pulmonary infection, as it may mimic many other abdominal diseases, such as infectious processes, neoplasms, and CD. The therapeutic response of PITB to anti-tubercular chemotherapy (ATT) and surgical procedures is very good. The purpose of this study is to emphasize the importance of considering PITB when a bowel wall thickening is seen in radiological imaging.

**Differential Diagnosis List:** Primary intestinal tuberculosis (PITB), Crohn’s disease, Infectious diseases, Neoplasm

**Final Diagnosis:** Primary intestinal tuberculosis (PITB)

**References:**


Description: Wall thickening of the terminal ileum with involvement of the ileocaecal valve. Origin:
Description: Wall thickening of the terminal ileum with involvement of the ileocaecal valve. Origin:
Description: Mesenteric stranding. Origin:
Description: Small bowel distension and predominantly right-sided gas-fluid levels.

Origin: