

Intestinal Tuberculosis (TB)

Intestinal Tuberculosis (TB) is a form of tuberculosis that primarily affects the gastrointestinal tract, especially the small intestine, ileocecal region, and the colon. It is caused by *Mycobacterium tuberculosis*, the same bacteria responsible for pulmonary tuberculosis (TB). Intestinal TB is often secondary to pulmonary TB but can also occur as primary TB when the bacteria are ingested or spread via the bloodstream.

It is more common in regions where TB is endemic, such as South Asia, Africa, and parts of Eastern Europe. Early diagnosis and treatment are crucial for preventing complications like intestinal perforation, strictures, and abscess formation.

Symptoms of Intestinal Tuberculosis:

The symptoms of intestinal TB can mimic many other gastrointestinal disorders, making diagnosis challenging. Common symptoms include:

- Abdominal Pain
- Chronic Diarrhea
- Weight Loss
- Fever
- Anorexia
- Fatigue
- Abdominal Distension
- Nausea and Vomiting
- Intestinal Obstruction
- Rectal Bleeding

Investigations for Intestinal Tuberculosis:

- Clinical History
- Laboratory Tests: Polymerase Chain Reaction (PCR): PCR for *M. tuberculosis* in stool, blood, or biopsy tissue can provide a rapid diagnosis with high sensitivity.
- Endoscopy
- Imaging Studies
- X-ray: May show gastric distension, free air (in case of perforation), or signs of intestinal obstruction.
- CECT Scan of the Abdomen
- Histopathology: Biopsy of the bowel wall

Management of Intestinal Tuberculosis:

The treatment of intestinal tuberculosis typically involves a multi-drug regimen of anti-tuberculosis (anti-TB) medications, and in some cases, surgical intervention may be required to manage complications.

1. Anti-Tuberculosis Medications

2. Monitoring During Treatment

- Liver function tests:
- Adherence.

Surgical Management

Minimal Invasive Surgery (Robotic/Laparoscopic)

Surgery may be required in cases of complications such as:

- Bowel perforation: Immediate surgical intervention is required if the bowel perforates due to advanced TB.
- Strictures or Obstructions: If there are significant bowel strictures causing obstruction, bowel resection may be necessary.
- Fistulas or Abscesses: Surgical drainage or resection of the affected area may be needed if there are complications like abscess formation or fistulas.

Nutritional Support

- Malnutrition is common in intestinal TB due to chronic disease and malabsorption. Nutritional support may be required, including enteral nutrition or parenteral nutrition if the patient is unable to take oral food.
- Vitamin supplementation may also be necessary, especially B12 and iron, if there is malabsorption due to small bowel involvement.

Treatment of Co-Infections

Many patients with intestinal TB may also have pulmonary TB or HIV co-infection, so appropriate treatment for pulmonary TB or HIV should be considered.