



## **A 17-Year-Old Female Presents with 6 Month History of Pain in Abdomen and Weight Loss**

Dr Saad Hussain Shah, FRCP Glasgow, FRCP Edinburgh <sup>1\*</sup>, Dr Saima Gillani, FCPS Paediatrics <sup>2</sup>,  
Dr Aizaz Imtiaz Khan, MBBS <sup>3</sup>

1. Classified Medical Specialist, Fauji Foundation Hospital Mansehra, Pakistan.
2. Associate Professor Paediatrics, Ayub Medical College, Abbottabad, Pakistan.
3. Medical Officer, Fauji Foundation Hospital, Mansehra Pakistan.

**Corresponding Author: Dr Saad Hussain Shah**, Classified Medical Specialist, Fauji Foundation Hospital Mansehra, Pakistan.

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## Clinical Case Report

A 17-year-old female presented to Out patients Department with 6 month history of diffuse abdominal pain, Weight Loss and weakness. She also complained of occasional loose stools but no bleeding in the stools.

### On examination:

- She had a pale appearance.
- There was no cervical lymphadenopathy.
- Chest was clear on auscultation.
- Abdomen was tender on palpation, but no guarding or rigidity was present and bowel sounds were positive.
- Her weight was 45 kilograms.
- Investigations were sent including Full Blood Count, Chest X ray and Ultrasound of abdomen.

### Full Blood Count showed:

- Hb: 10.9 g/dl: Normocytic Normochromic Anemia
- Normal platelets and leukocyte count.

### Ultrasound abdomen showed:

- Symmetrical Cecal thickening on Abdominal Ultrasound with adjacent mesenteric lymph nodes.



### Cecal thickening on ultrasound of abdomen

**Discussion Scenarios:**

What would be the differential Diagnosis for this case?

What would be the most likely Diagnosis?

Which part of intestine is mostly affected by Tuberculosis?

How does abdominal TB spread?

What are risk factors that lead to development of Abdominal TB?

What further investigations should be performed?

What are the complications of abdominal TB?

What is the treatment of abdominal TB?

When is surgery required for Abdominal TB?

**Discussion**

**What would be the differential Diagnosis for this case?**

Circumferential and symmetric thickening of the bowel wall are usually attributed to benign conditions such as

Inflammatory.

Infections.

Bowel Oedema.

Ischemia.

Inflammatory processes that may present as focal areas of bowel wall thickening include:

Diverticulitis,

Appendicitis and occasionally.

Tuberculosis.

**What would be the most likely Diagnosis?**

Looking at the history and clinical findings of this patient, the most likely diagnosis that comes to mind is Abdominal TB.

Although Crohns disease needs to be excluded as well, however it will have involvement of other systems as well and the patient would have oral ulcers and blood in stools as well.

This patient has a 6 month history of pain in abdomen and weight loss with loose stools and ultrasound of abdomen shows symmetrical cecal thickening with adjacent mesenteric lymph nodes enlargement, hence the most likely diagnosis that comes into mind would be Abdominal Tuberculosis.

**Which part of intestine is mostly affected by Tuberculosis?**

TB can affect any region or multiple regions of the GI tract.

Although ileum and caecum are the most common sites of intestinal involvement and are affected in 75 % of cases.

The ulcerative variety of TB commonly manifest with chronic diarrhea and malabsorption.

Whereas the hypertrophic variety of TB most commonly presents with pain abdomen and intestinal obstruction.

**How does abdominal TB spread?**

The modes of infection of abdominal TB include:

Swallowed infected sputum.

Ingestion of bacilli from infected milk products or meat.

Haematogenous spread from a lung focus.

Spread via lymphatics from infected lymph nodes and Contiguous spread from adjacent organs.

### **What are risk factors that lead to development of Abdominal TB?**

Risk factors for development of abdominal TB include.

Malnutrition.

Diabetes Mellitus.

Underlying malignancy.

Treatment with Anti-tumor necrosis factor agents, corticosteroids and use of CAPD : continuous ambulatory peritoneal Dialysis.

Cirrhosis.

HIV infection: Human Immunodeficiency Virus.

### **What further investigations should be performed**

Further Investigations include:

- ICT Tuberculosis, Quantiferon Gold test for TB
- CT Abdomen
- Ileocolonoscopy with Biopsy

### **What are the complications of abdominal TB?**

Untreated TB of the intestine may lead to intestinal obstruction, fistula or even abscess and perforation with resultant peritonitis.

### **What is the treatment of abdominal TB?**

Abdominal TB needs to be treated with at least 3-4 anti TB drugs for the initial 2 months and subsequently 2 anti TB drugs for at least 7-10 months.

The commonly used drugs during the initial 2 months therapy (intensification phase) are Isoniazid (INH), Rifampicin, Ethambutol and Pyrazinamide.

During the next 7-10 months (continuation phase) 2 the drugs commonly used are INH and Rifampicin.

**When is surgery required for Abdominal TB?**

Surgery is required whenever there is perforation, abscess or fistula formation.

**References**

1. <https://www.pediatriconcall.com/articles/infectious-diseases/tuberculosis-of-the-abdomen>
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