

# EUS WITH TRUCUT BIOPSY FOR DIAGNOSIS OF INTRA-ABDOMINALTUBERCULOSIS

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## CASE 1

An 80-year old Italian male presented with left upper quadrant pain, excessive fatigue, weight loss and normocytic anemia. EGD revealed thickened and inflamed gastric mucosa and two submucosal gastric impressions.



Figure 1 EGD of gastric mass CT scan of the abdomen showed low attenuation lesions in the omentum adjacent to the stomach and low attenuation gastrohepatic ligament lymph nodes.



Figure 2 CT Scan of omental lesions The working diagnosis was lymphoma. Using linear EUS and fine needle aspiration, tissue was collected for cytology and microbiology.

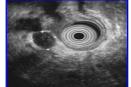


Figure 3 EUS of the gastric mass Cytology was initially non-diagnostic, so Trucut needle biopsy was performed. Perigastric lymph node cytology was positive for necrotic

material with numerous lymphoid cells. AFB and fungal studies were negative. Trucut biopsy on pathology revealed necrotizing granuloma without acid-fast bacilli.

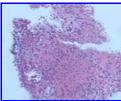


Figure 4 Granuloma 4 weeks later AFB cultures grew Mycobacterium tuberculosis complex.

## CASE 2

A 44-year old male with AIDS presented with fever, dysphagia, vomiting, weight loss and intermittent nonbloody diarrhea. On admission he was febrile and tachycardic. Physical exam revealed a cachectic, illappearing male. Abdominal examination was unremarkable. There was no palpable lymphadenopathy. The patient was anemic; the CD4 cell count was 5. EGD revealed extrinsic compression of the stomach.



Figure 5 EGD of extrinsic compression of the stomach

CT scan of the abdomen showed a mass in the splenic hilum, indenting the posterior aspect of the stomach, and smaller masses in the perigastric region



Figure 6 CT Scan of splenic hilar mass EUS was performed with multiple fine needle aspirations of the lesions but did not provide a definitive diagnosis, and EUS was repeated with Trucut biopsy.



Figure 7 EUS of the perigastric lymph nodes



Figure 8 FNA of the lymph node Histology revealed necrotic tissue mixed with lymphoid cells, histiocytes, and caseating granuloma with presence of AFB, further identified as Mycobacterium tuberculosis.

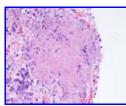


Figure 9 Caseating granuloma The patient was treated with a fourdrug regimen for TB; his condition improved and he was discharged.

#### **CONCLUSION**

Diagnosis of abdominal tuberculosis presents a challenge because it is uncommon, inaccessible, and yields few numbers of bacilli on FNA. It is important to realize, that TB seems to be resurging and abdominal TB needs to be considered in the differential in both immunocompromised and immunocompetent patients. In the above two cases we show that EUS with Trucut needle tissue acquisition can be an accurate and safe method of diagnosing lesions accessible through the gastrointestinal tract. EUS guided Trucut biopsy played a crucial role in the diagnosis of intra-abdominal tuberculosis in both the immunocompromised and the immunocompetent patient.

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