# Multiple Abdominal Tuberculosis Lymphadenopathy

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## Introduction:

Abdominal Tuberculosis is commonly seen in areas where the prevalence is high(1)

Tuberculosis (TB) can involve any part of the gastrointestinal tract from mouth to anus, the peritoneum & the pancreatobiliary system (1)

The diagnosis of intestinal tuberculosis can be difficult since less than half of patients have an abnormality on CXR& active pulmonary T.B is evident in only 14% of the patients (2)

#### Case report:

A 54 year old woman was admitted with history of sever epigastric pain radiating to the back for the last two months. There was history of anorexia & weight loss but neither fever nor night sweating were presen .The patient denied any history of vomiting or change in the bowel habit& there was no history of cough or expectoration.

## On examination:

There was no pallor or jaundice.

No cervical, axillary or inguinal lymph node enlargement.

Abdominal examination was soft, no organomegaly, no ascites.

Chest examination was normal

Investigations showed hemoglobin of 13.0 gm/dl & ESR of 20 mm in first hour.

Results of serum biochemistry were within normal limits.

Ultrasound of abdomen showed multiple peripancreatic lymph nodes & tiny gall stones.and para aortic lymph node enlargement.

Chest radiography revealed prominent both hillar areas as shown in figure (1)

Esophageogastroscopy: showed laxed cardia. Baruim follow through revealed multiple filling defects in the jejunum possible due to external compression from adjacent lymph nodes as shown in figure (2).

CT-scan of the abdomen showed peripancreatic Lymph node enlargement & para aortic lymph node enlargement as shown in figure (3).

Endoscopical Ultrasound(EUS) revealed enlargement of 5 mediastinal lymph node the largest being  $2\times1.8$ cm, multiple lymph nodes seen in the celiac axis the largest  $2\times1.8$ cm ,multiple lymph nodes seen in the Paraaortic area near superior mesenteric artery origin (SMA) & multiple nodes seen at peripancreatic area the largest  $2\times0.7$ cm.

Aprovisional diagnosis of lymphoma was made and the patient was advised diagnostic laperotomy to get tissue for histopathology.

Diagnostic laperatomy was done for the patient, and Para aortic lymph node sized 2×2cm excised and sent for histopathological examination.

The result of histopathological was multiple epitheloid granuloma with minimal necrosis that was consistent with tuberculosis as shown in figure (4 a,b,c,d).

A diagnosis of abdominal tuberculosis was made & the patient was put on four anti tuburculous drugs( Isoniazide, Ethambutol, pyrazinamide & Rifampicine)

Then we followed the patient response and after two month the patient showed marked subjective improvement regarding pain intensity , appetite , weight gain and less analgesic need.

(EUS) done and showed celiac axis lymph node decreasing in the size and numbers the largest 6  $\times 8$  mm, peripancreatic lymph node disappeared completely, Para aortic lymph node decreasing in size largest 1.2×1.4 cm and mediastinal lymph nodes nearly remain the same size largest 2.3×1.7 cm.

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initiating After four month from the treatment.Ultrasound examination of the showed abdomen disappearance of all peripancreatic lymph nodes , para aortic lymph



figure (1)



figure (3)

nodes and patient advised to continue the treatment for one year.







Figure (4a)



Figure (4b)



Figure (4c)



# Figure (4d)

# Discussion:

Tuberculosis bacteria reach the gastrointestinal tract via haematogenous spread, ingestion of infected sputum, or direct spread from infected contiguous lymph nodes and fallopian tubes. (1,2)

Extra pulmonary involvement occurs in only 15% of patient with tuberculosis. (3)

T.B of the gastrointestinal tract is the sixth most frequent form of extra-pulmonary site, after lymphatic, genitourinary, bone & joint, miliary & meningeal tuberculosis. (4)

Enlargement of the abdominal lymph nodes may cause direct pressure on various parts and abdominal pain might be due to pressure of large celiac lymph node on the celiac plexus.(7)

All groups of lymph nodes within the abdomen can be infected particularly those around the pancreas, portal region, aorta, vena cava and enlarged lymph node looks hypoechoic on ultrasonography. (5,6).

Abdominal lymph nodal and peritoneal tuberculosis may occur without gastrointestinal involvement. (5, 6).

Histologically, the characteristic lesion is a caseating granuloma and it is not always seen, mesenteric lymph node may be enlarged, matted may caseate(5,6) and in our case the and caseation was minimal.

Hilar and mediastinal lymphadenopathy can be part of disseminated tuberculosis, in the tropics the tuberculosis usually will be the most likely etiology and may resolved completely but this may take many months to resolved. (7)

EUS is very useful in detecting mediastinal lymph nodes, mesenteric lymph nodes, celiac

axis lymph nodes and para aortic lymph nodes enlargement.(7)

Such finding can also seen in other diseases like carcinomatosis and lymphoma.

In the view of the prevalence of T.B in our countery, high index of suscipicion must be high. Tuberculosis is a significant health problem in Iraq and abdominal tuberculosis is often seen in a number of patients without any risk factor and in the abscence of pulmonary tuberculosis(T.B)

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