Case Report:
Isolated Periportal Tuberculosis Lymphadenopathy: A Rare Entity

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Abstract
Abdominal tuberculosis is a common cause of morbidity in the developing countries but its incidence is also increasing in the developed countries because of HIV infections. Mesenteric lymphadenopathy is a common presentation in abdominal tuberculosis followed by peripancreatic and periportal adenopathy. It is very rare to get isolated periportal tuberculosis lymphadenopathy. This is a case of a young lady, who presented with painless obstructive jaundice due to periportal lymphadenopathy. After investigations she turned out to be a case of tuberculosis adenitis.

Key Words: Periportal lymphadenopathy – Tuberculosis – Obstructive jaundice.

Introduction
ABDOMINAL tuberculosis is one of the important causes of morbidity in the developing world. Its incidence is also increasing in the developed world because of the HIV infection. Abdominal tuberculosis may be primary or secondary. Primary abdominal tuberculosis is caused by the ingestion of food contaminated by the tubercle bacilli while secondary abdominal tuberculosis is caused by the swallowed sputum which is a more common entity. Sometime the mesenteric lymph nodes are affected during the bacteremic phase of pulmonary tuberculosis without any intestinal involvement [1].

The mesenteric lymph nodes are commonly involved in abdominal tuberculosis followed by the involvement of peripancreatic, periporal and para-aortoc lymph nodes but it is very rare to get the isolated periportal lymphadenopathy due to tuberculosis [2]. It is mandatory in this type of cases to rule out malignancy especially in older patients. The diagnosis is sometimes very difficult, especially if patients are presenting with atypical symptoms. We are reporting a case who presented with painless obstructive jaundice due to isolated periportal tuberculosis lymphadenopathy.

Case Report
A 31-year old lady was admitted to Aseer Central Hospital, Abha, with complaints suggestive of obstructive jaundice. She had no history of abdominal pain, fever or loss of weight. There was history of loss of appetite. Her ultrasonography showed gall bladder sludge with dilated common bile duct (CBD) of 10mm and a large lymph node at porta hepatis. Total bilirubin was 5.1mg/dL with a direct fraction of 4.2mg/dL. Alanine aminotransferase and aspartate aminotransferase levels were 86IU/L and 92IU/L, respectively while alkaline phosphatase was 280IU/L. Contrast computerized tomographic (CT) scan was advised which showed multiple hypodense mass lesions around the porta hepatis and portal vein with peripheral rim enhancement and mildly dilated CBD without any intrahepatic dilatation (Fig. 1). No other significant findings were noted. Tumor markers CA1 9-9 and AFP were within normal limits. The CT finding was very suggestive of tuberculosis adenitis. So the patient was investigated on the lines of tuberculosis. Her chest X-ray was normal. White blood cell count was within normal limits with mild lymphocytosis. Mantoux read 25x25mm. CT-guided aspiration was planned, but was refused by the patient. On further enquiry, the patient revealed the history of contact with a known pulmonary tuberculosis patient.

The patient was put on antituberculosis treatment (ATT) on the empirical basis as CT scan and Mantoux were very suggestive of tuberculosis. After 6 weeks of follow-up, her total bilirubin came down 1.9mg/dL with the direct fraction of
1.2 mg/dL and there was marked improvement in her appetite. So, ATT was continued and a final diagnosis of periportal tuberculosis lymphadenopathy without any primary focus was made. The patient is being followed and showed improvement both clinically and radiologically.

Fig. (1): Abdomen CT scan showing multiple hypodense nodes with peripheral rim enhancement at porta hepatis.

**Discussion**

The incidence of abdominal tuberculosis is increasing all over the world because of increasing HIV infections. Lymph node involvement is the most common presentation of abdominal tuberculosis. Mesenteric and peripancreatic lymph nodes are most commonly involved and usually they are in groups [2].

Isolated retroperitoneal lymphadenopathy is uncommon. Most patients have other areas of affected lymph nodes. The most common site of involvement is periportal followed by peripancreatic and mesenteric lymph nodes [3].

The incidence of extra-pulmonary tuberculosis is more common in young adults, particularly in females as reported by a study from Saudi Arabia [4]. Our patient was also a young adult female aged 31 years.

The diagnosis of abdominal tuberculosis is difficult, especially if it is isolated hepatobiliary or peripancreatic disease. The diagnosis is sometimes confirmed only after exploratory laparotomy [5]. Preoperative diagnosis is made either by guided biopsy or CT scan findings. The typical finding of tuberculosis lymph node on CT is the hypodense nodes with peripheral enhancement in post contrast scans [6]. The CT finding in our patient was also of multiple hypodense mass lesions with peripheral enhancement. The detection of these hypodense lesions in high risk patients help to reach the correct diagnosis [7]. In our patient, there was a history of contact with an untreated case of pulmonary tuberculosis and her Mantoux was strongly positive.

The presenting feature of hepatobiliary and peripancreatic tuberculosis is mainly the abdominal pain followed by jaundice and fever [8]. Obstructive jaundice due to tuberculosis is caused by tuberculous enlargement of the head of the pancreas, tubercular lymphadenitis or a tuberculosis mass of the retroperitoneum [9]. Our patient presented only with painless obstructive jaundice due to TB adenitis. The sole symptom of painless jaundice is very rare in tuberculosis and it raises the suspicion of malignancy.

We treated our patient with antitubercular drugs. She showed improvement both clinically and radiologically. Follow-up was done in the clinic with contrast CT scan of the abdomen. The enhanced abdominal CT is useful for the diagnosis and follow-up of tuberculosis adenitis patients [10].

Tuberculosis should always be considered as a differential diagnosis in young patients who presented with periportal or peripancreatic lymphadenopathy. The presentations are very varied and to reach a diagnosis is usually difficult. It is not always possible to obtain a tissue for cyto- or histopathological examination, one should rely on clinical and CT scan findings to reach to a proper diagnosis.

**References**

