

Introduction

Tuberculosis is an infectious disease caused by mycobacterium tuberculosis. It usually involves the lung, but extrapulmonary involvement is not uncommon. **Hepatobiliary tuberculosis is a rare form of extrapulmonary tuberculosis that can be mistaken for hepatic hilar malignant tumors.**

Case presentation

A 38-year-old gentleman presented to the hospital with right upper quadrant pain for 10 days that was associated with itching, and dark urine; he reported no fever or weight loss. His clinical exam showed icteric sclera. His laboratory investigations were remarkable **for direct hyperbilirubinemia** with elevated AST, ALT, and ALP (Table 1). His ultrasound abdomen showed mildly prominent central intrahepatic biliary duct and prominent upper CBD (measuring 9 mm) with no obvious cholelithiasis. **Endoscopic ultrasound (EUS) demonstrated a 24x19 mm lesion** that is adjacent to the pancreatic head and neck, **at the liver hilum, compressing the proximal CBD** (Figure 1 A,B). EUS-guided fine-needle biopsy showed necrotizing granulomatous inflammation. **TB PCR and culture** from the same lesion were **positive**, and the patient was started on an anti-TB medication regimen.

Learning points

- Extrapulmonary tuberculosis can be associated with pulmonary tuberculosis or occur in an isolated form.
- The absence of constitutional and pulmonary symptoms makes the diagnosis more challenging.
- Few cases reported compression of the common bile duct due to tubercular hilar adenopathy leading to obstructive jaundice.
- **The endoscopic ultrasound plays an important role in obtaining a tissue biopsy to establish the diagnosis and to exclude malignant hepatic hilar tumors that can present in a similar fashion.**

Laboratory test	Patient's value	Normal range
Total bilirubin	79.70 μmol/L	3.50 - 24
Direct bilirubin	46.30 μmol/L	0.0 - 5.10
ALT	478.20 U/L	0.0 - 40.0
AST	270 U/L	0 - 37
Alkaline phosphatase	413 U/L	40.0 - 129.0

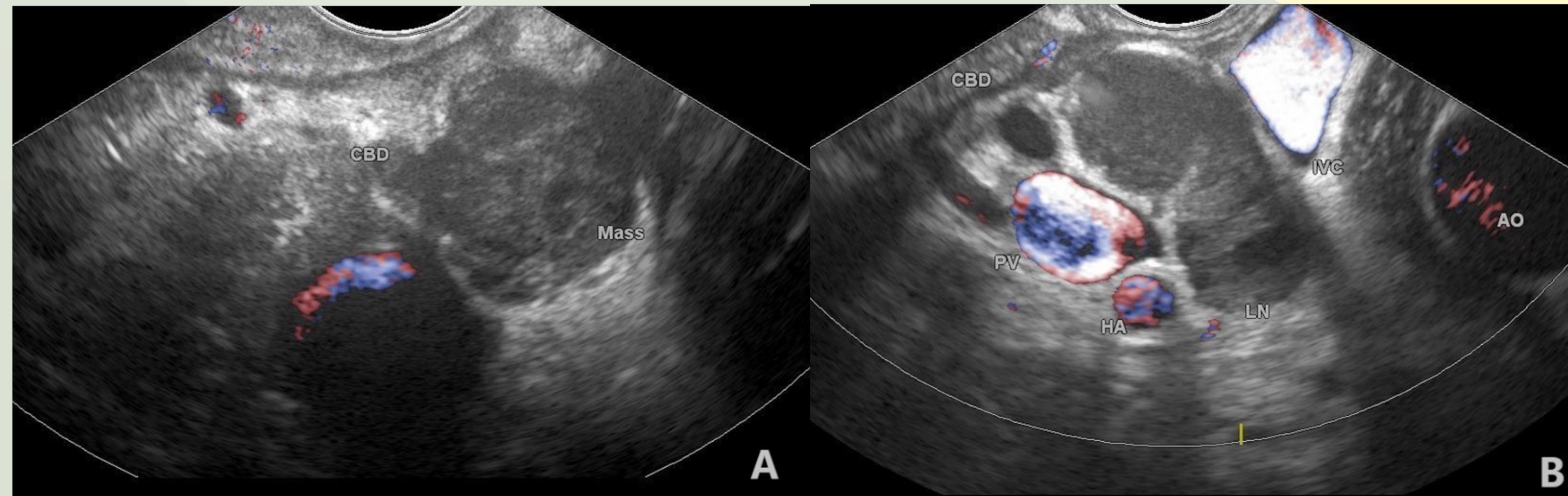


Figure 1 A,B: endoscopic ultrasound images showing the tuberculous lymphadenopathy in close proximity to the common bile duct.

CBD: common bile duct, PV: portal vein, HA: hepatic artery, LN: lymph node, IVC: inferior vena cava, AO: aorta

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