

**AN UNUSUAL CAUSE OF  
HEPATIC LESION**

# CASE

A 46 year old female farmer, presented with chief complaints of

Fever; intermittent for 2 months

Loss of weight : 10-12 kgs in 2 months

Abdominal pain in the epigastrium and right hypochondrium : 1 month

Loss of appetite: 1-2 months

## **NO HISTORY OF**

Loose stools

Abdominal distension

Blood in vomitus

Black coloured stools

Yellowish discolouration of eyes

# CLINICAL EXAMINATION

## General examination

Patient was poorly built, conscious and oriented to time, place and person

- Afebrile
- Pulse-98/min
- Bp-106/60 mm Hg
- SpO<sub>2</sub>- 95 % on Room air
- **Pallor +**
- **Cervical lymphadenopathy +** 2x1 cm on the right and 1x1 cm on the left
- **Inguinal lymphadenopathy +** 4x3 cm on the right and 2x1 cm on the left

## Systemic examination

### **☐ Per Abdomen:**

- 1. Tender hepatomegaly present. Liver span 18 cm. Firm in consistency**
2. No splenomegaly.
3. No evidence of free fluid in the abdomen.

### **☐ CNS, CVS, RS: No abnormality detected**

# DIFFERENTIAL DIAGNOSIS

POSITIVE FINDINGS: Presence of pallor

Presence of generalized lymphadenopathy

Tender hepatomegaly

- Human immunodeficiency Virus infection
- Disseminated Tuberculosis
- Malignancy such as Non Hodgkins Lymphoma and Chronic Myeloid Leukemia
- Sarcoidosis

# LABORATORY PARAMETERS

HB	11 gm/dl
TLC	11600
PLATELETS	2,32,000
TOTALBIL	1.1 mg/dl
DIRECT BIL	0.3mg/dl
INDIRECT BIL	0.8mg/dl
SGOT	32 U/L
SGPT	40 U/L
ALP	156 U/L

S UREA	38
S CREATININE	0.62
Na+/K+	138/3.60
HIV/HBASG/HCV HEP-E/HEP-A	NON REACTIVE
BSL	110

**ECG**-Normal sinus rhythm

# RADIOLOGICAL INVESTIGATIONS

➤ **CHEST X-RAY-** No abnormality detected

➤ **USG ABDOMEN AND PELVIS-**

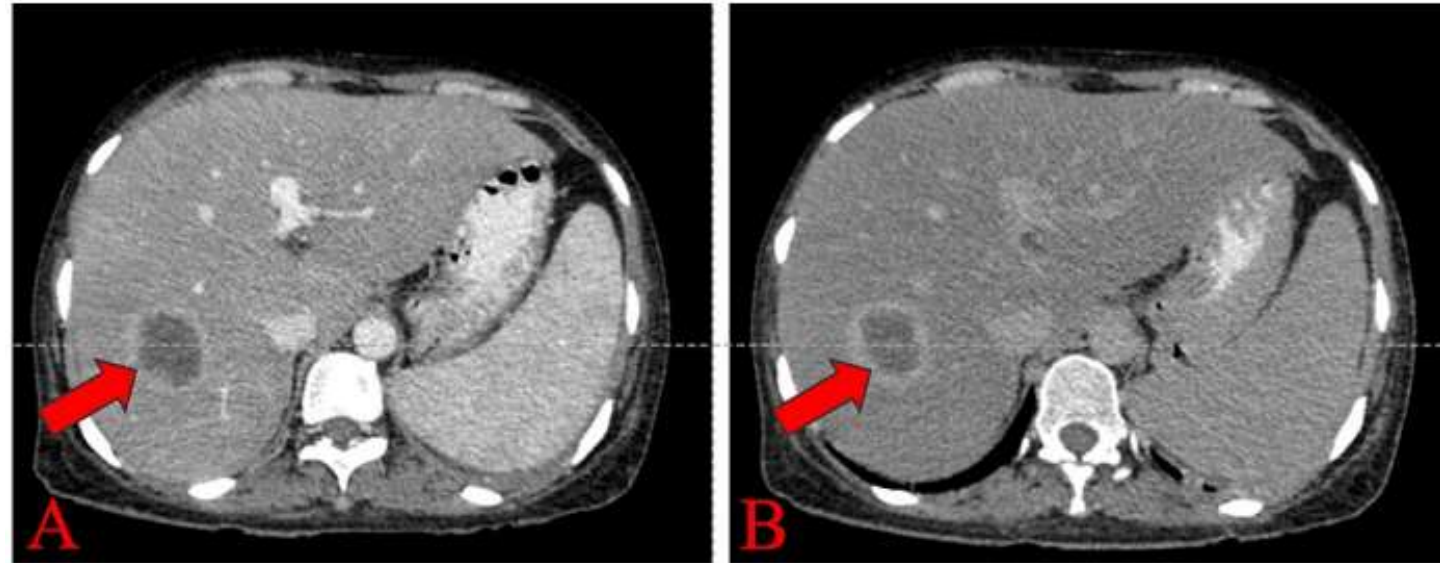
An **anechoic cystic lesion** of size measuring **23x27 mm** with internal echoes within is noted in right lobe of liver with significant vascularity on colour doppler.

**Conglomerated lymph nodes** collectively measuring 34x20 mm noted in the right iliac fossa region.



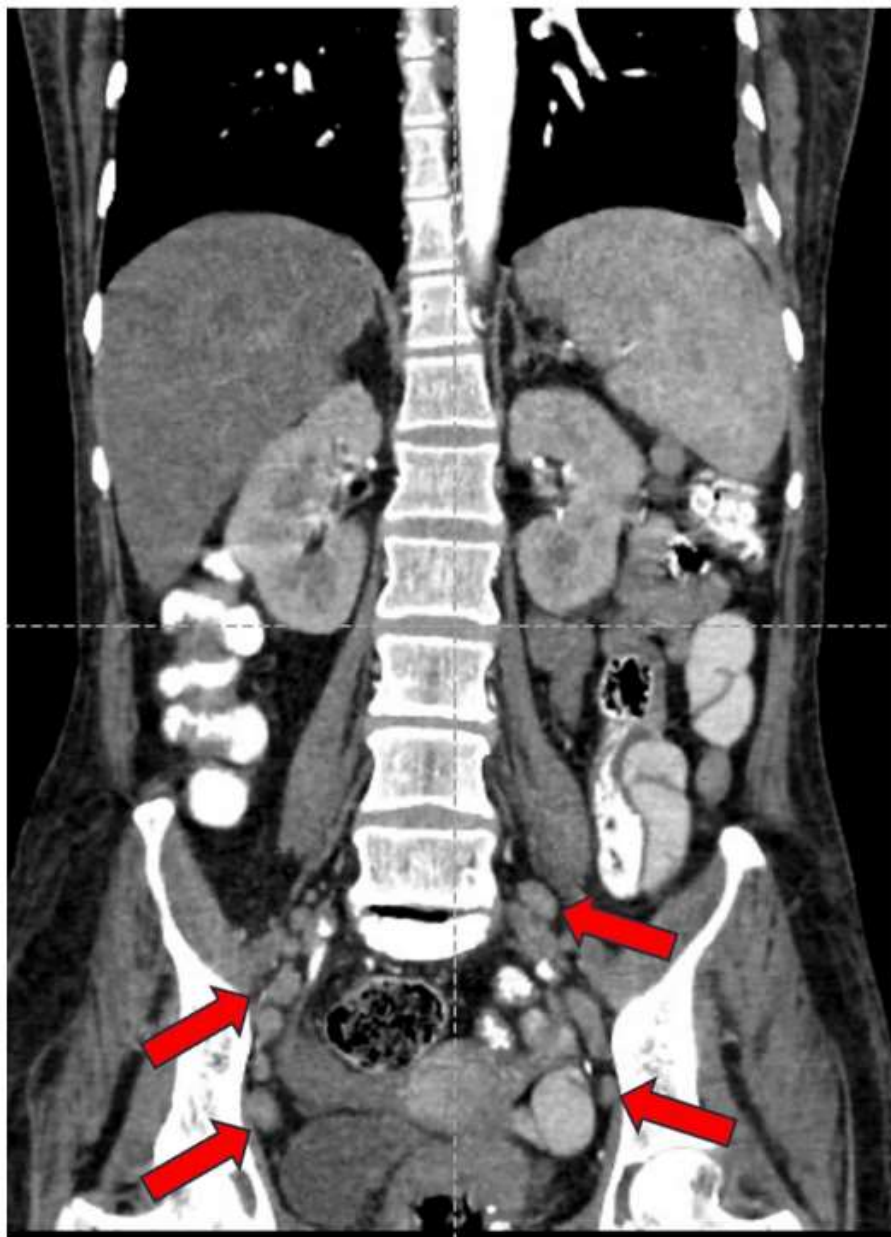
## **CECT ABDOMEN AND PELVIS:**

**PELVIS:** A well-defined, peripherally enhancing hypodense lesion measuring 34x36x32 mm (CCxAPxTR) was noted in segments VII and VI of the right lobe of the liver on contrast-enhanced computed tomography of the abdomen and pelvis (CECT-AP). It coalesced with a similar sub-centimetric-sized lesion just inferior to it, most likely suggestive of a liquefied hepatic abscess

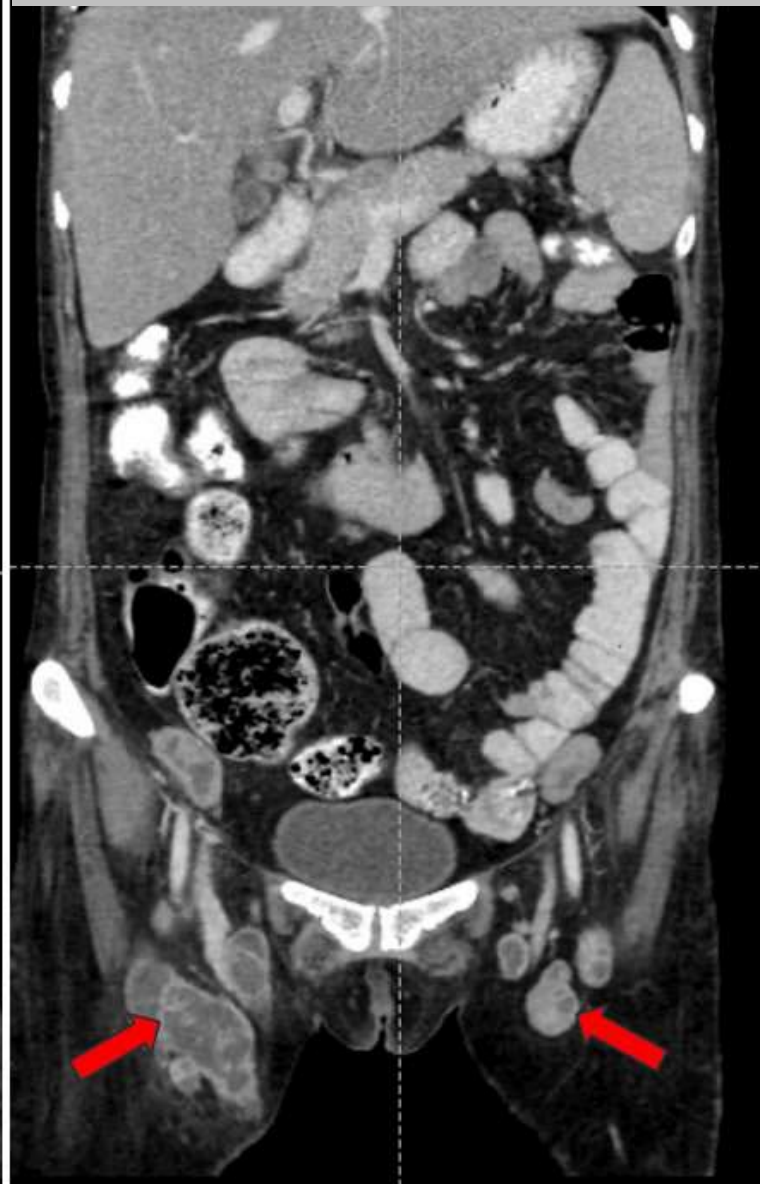


CECT-AP axial section: (A) venous phase showing a welldefined hypodense lesion with peripheral enhancement in segments VII and VI of the liver (shown by the red arrow) likely to be a hepatic abscess and (B) delayed phase showing the same lesion with peripheral enhancement shown by the red arrow.

LYMPH NODES ALONG BILATERAL ILIAC VESSELS



NONENHANCING NECROTIC LYMPH NODES IN THE BILATERAL INGUINAL REGION



NONENHANCING NECROTIC LYMPH NODES AT THE PORTA HEPATIS



## **FURTHER ANALYSIS**

**USG-GUIDED FINE NEEDLE  
ASPIRATION CYTOLOGY  
(FNAC)**

**SURGICAL REMOVAL OF  
THE RIGHT INGUINAL  
LYMPH NODE FOR BIOPSY**

**PUS**

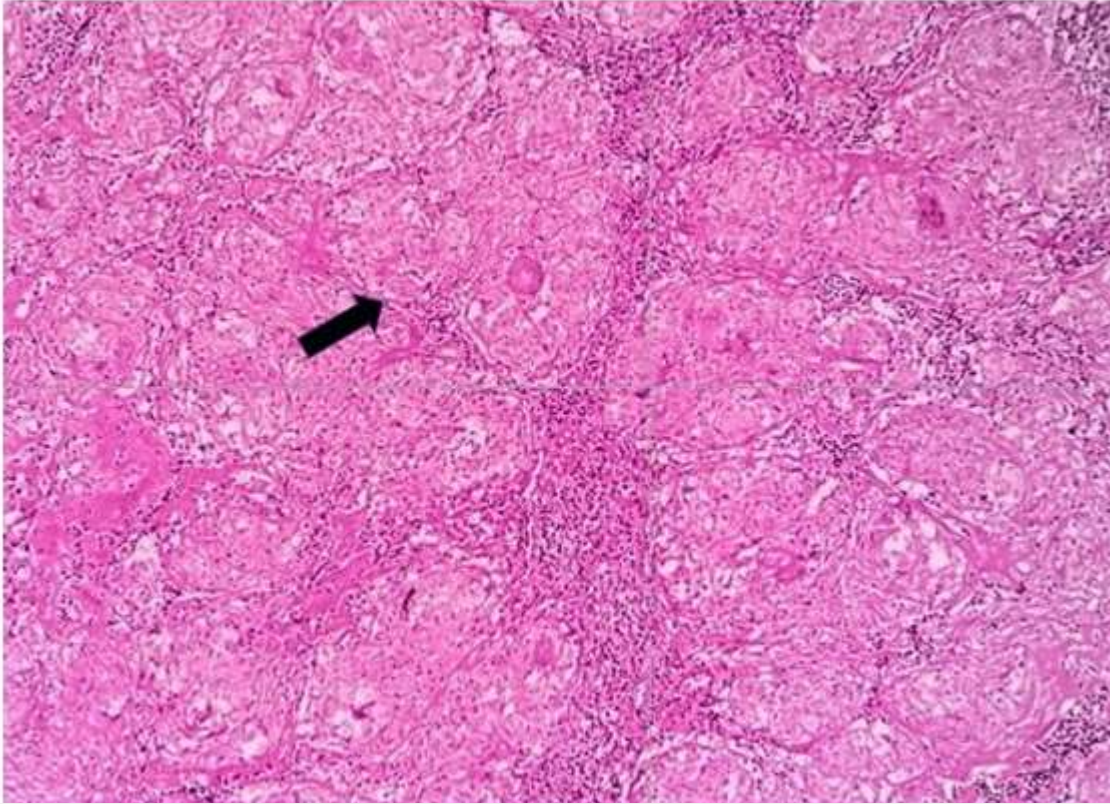
**LYMPH NODE SAMPLE**

**SENT FOR CULTURE  
SENSITIVITY AND CBNAAT**

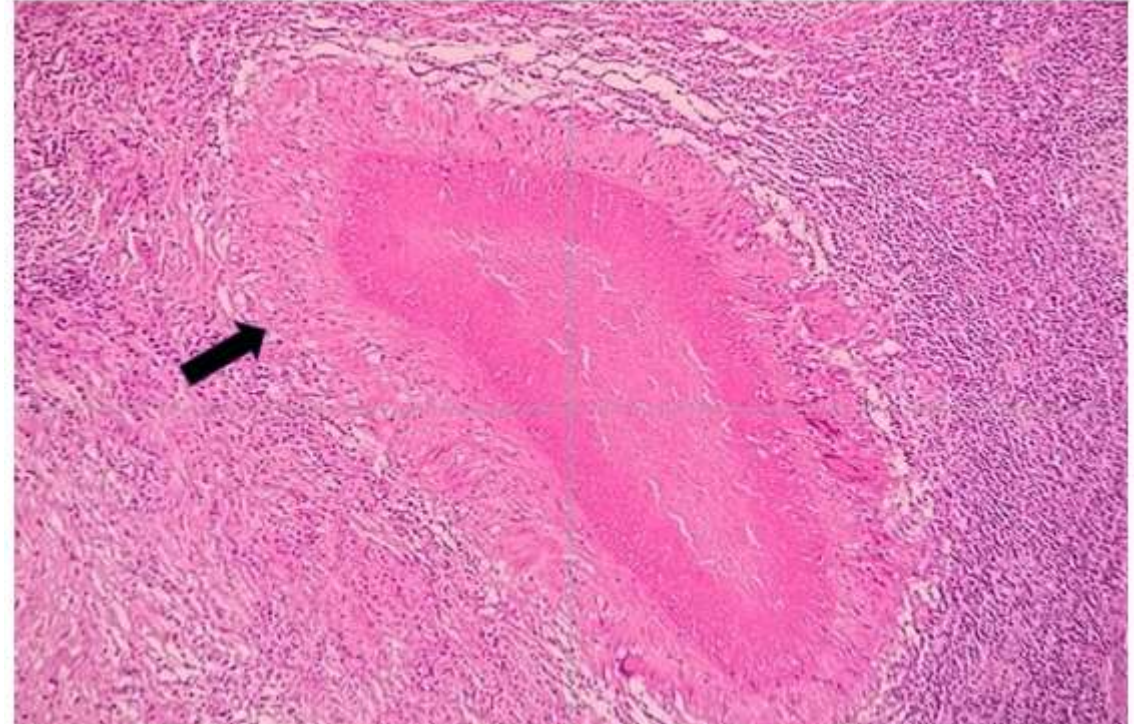
TEST	REPORT
Hepatic abscess pus aspiration C/S	No growth
Hepatic abscess pus aspiration CBNAAT	<b>Mycobaterium tuberculosis detected</b>
Inguinal lymph node C/S	No growth
Inguinal lymph node CBNAAT	<b>Mycobaterium tuberculosis detected</b>
Entamoeba histolytica IgG ELISA	Negative



## SURGICAL REMOVAL OF THE RIGHT INGUINAL LYMPH NODE FOR BIOPSY



Inguinal lymph node section showing multiple epithelioid cell granulomata with surrounding caseating necrosis under 20x magnification H&E stain.



Inguinal lymph node section showing the central area of caseous necrosis with surrounding lymphohistiocytes and Langhans type giant cells and the peripheral rim of lymphocytes under 40x magnification H&E stain.

# **FINAL DIAGNOSIS**

**HEPATIC ABSCESS WITH LYMPHADENITIS OF  
TUBERCULAR ETIOLOGY**

# TREATMENT

Two months of Anti-tubercular therapy consisted of a combined regimen of

- Rifampicin (10 mg/kg daily),
- Isoniazid (5 mg/kg daily),
- Ethambutol (15 mg/kg daily), and
- Pyrazinamide (25 mg/kg daily) for two months

The patient continued four months of Anti-tubercular therapy with **Rifampicin, Isoniazid and Ethambutol**.

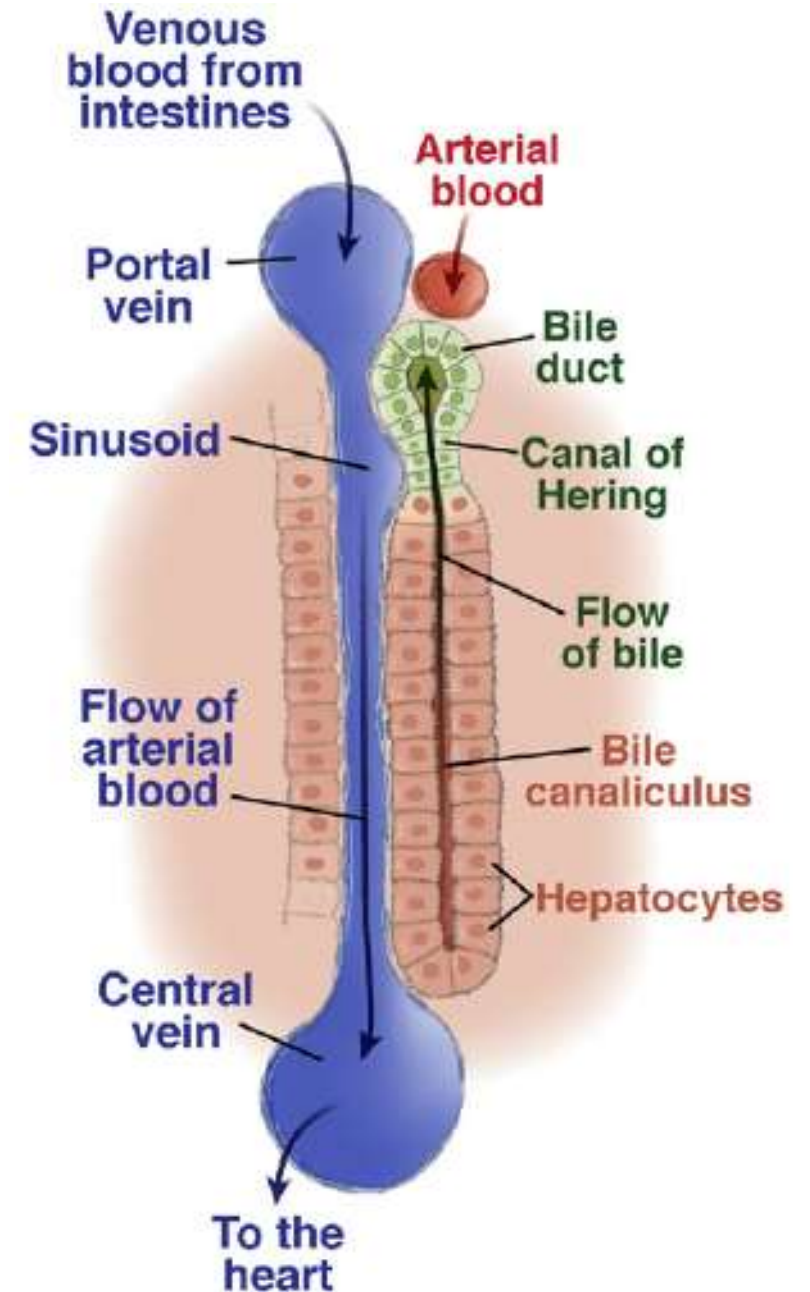
On follow up, patient had improved symptomatically with improved appetite and weight gain of nearly 3-4 kgs

# DISCUSSION

1. Hepatic TB is extremely rare, representing less than 1% of all TB illnesses.
2. The scarcity of this occurrence can be attributed to the diminished oxygen pressure in the liver tissue, which obstructs the proliferation of aerobic microorganisms.
3. Frequently observed symptoms comprise **pain in the abdomen, mild fever, hepatomegaly, and right upper quadrant tenderness**. The patient showed each of the aforementioned characteristics. Young adults are the most commonly affected age group.
4. An abdominal CECT is a preferred imaging modality that consistently reveals a well-defined, peripherally enhanced hypodense lesion in the liver, aiding in diagnosis, along with granulomatous inflammation accompanied by caseating necrosis on histopathological examination.



1. There are two presentations of hepatic tuberculosis: miliary hepatic disease and isolated hepatic disease.
2. Liver involvement in miliary TB occurs in cases of disseminated tuberculosis and reaches the liver through the hepatic artery.
3. Isolated hepatic tuberculosis reaches the liver from the intestinal tract through the portal vein or gastrointestinal lymphatics .
4. The liver has numerous reticuloendothelial cells and ample vascular perfusion which contributes to granulomata formation close to the portal canal.



# TAKE HOME MESSAGE

1. Hepatic lesions need not always be of acute pyogenic or amebic origin. Chronic infections like tuberculosis must also be considered as important alternative diagnosis.
2. Hepatic TB is an often overlooked diagnosis. Early detection of hepatic TB allows for efficient treatment and management of the same.

## REFERENCES

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**THANK YOU**