

# **PYOGENIC LIVER ABSCESS (PATHOLOGY)**

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- Most liver abscess are pyogenic origin. Less often they are amoebic, hydatid and rarely actinomycotic.
- Incidence is higher in old age and in immuno suppressed patients such as in AIDS , transplant recipient and those in intensive chemotherapy.

- **Causes**

1. Ascending cholangitis – through ascending infection in the biliary tract due to obstruction. Eg. Gall stone, cancer
2. Portal Pyaemia
3. Septicaemia
4. Direct infection
5. Iatrogenic Causes

- The commonest infectious organism
  - Gram negative bacteria
    - ( E.Coli,Pseudomonas,Klbsiella)

- **Clinical Features**

1. Pain in right upper quadrant

2. Fever

3. Tender hepatomegaly

4. Jaundice

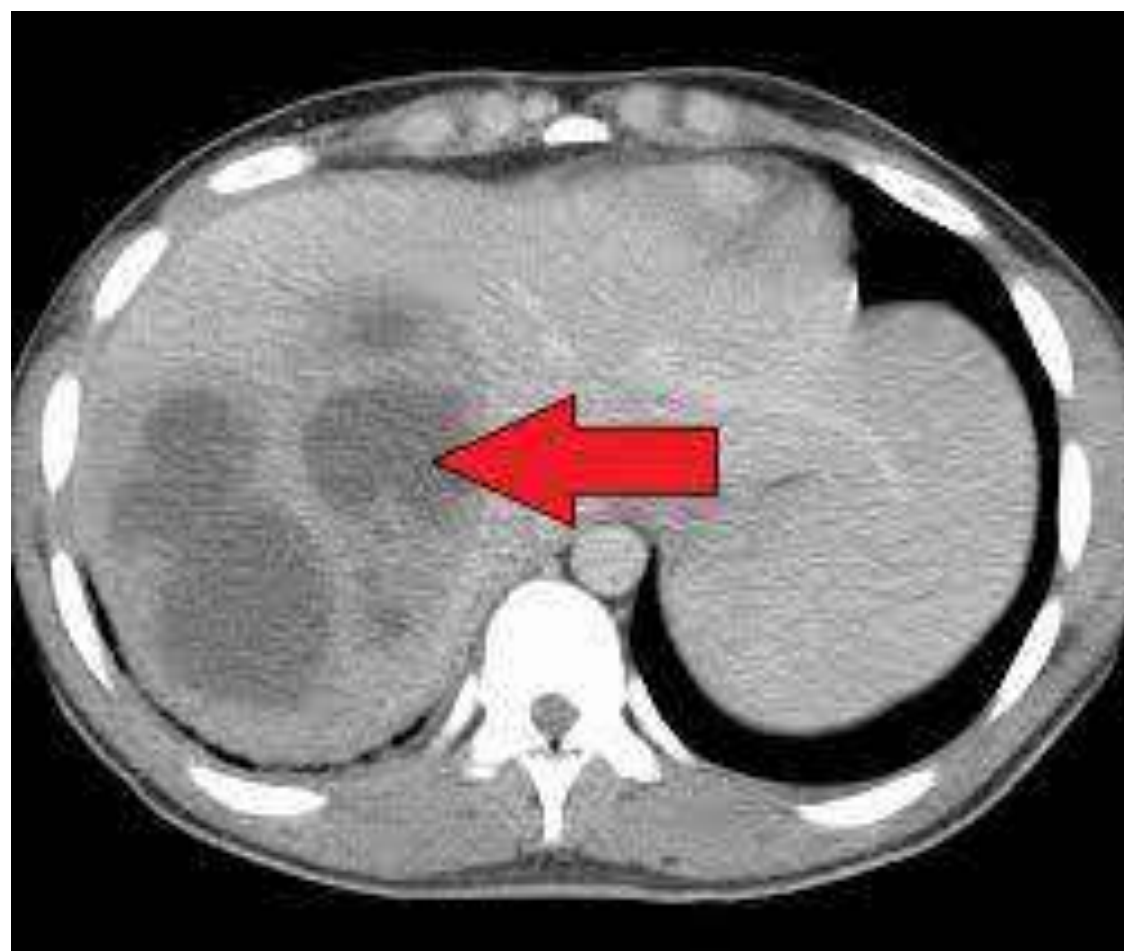
5. Increased serum alkaline phosphatase

- **Morphological features**

- Single or multiple yellow abscess.
- 1cm or more in diameter in an enlarged liver
- Abscess are particularly common **in right lobe of the liver**

- **Microscopically**

- necrotic abscess
- Puss and blood clots in portal vein
- Inflammation and congestion



# **Amoebic Liver Abscess**

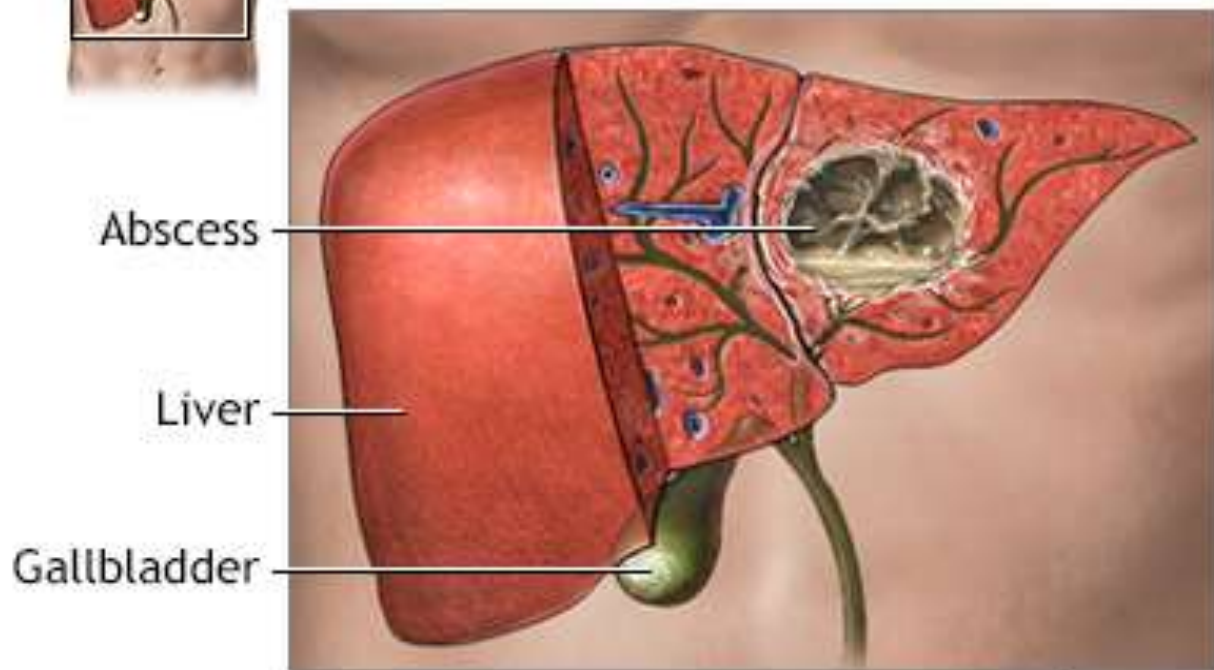


- Amoebic liver abscess are less common than pyogenic liver abscess
- They are caused by *Entamoeba histolytica*

- **Morphological features**
- Grossly amoebic liver abscess are usually solitary and more often located in right lobe in the posterosuperior portion
- It is **having size of an orange**
- The centre of abscess contains large necrotic area having reddish-brown, thick puss resembling chocolate sauce.
- The abscess wall consist of irregular necrotic liver tissue.



Amebic liver abscess is caused by *Entamoeba histolytica*



# **Tumors of liver, Gall bladder,pancreas**

# Benign hepatic tumors

- These include
  1. Hepatocellular adenoma
  2. Bile duct adenoma
  3. Haemangioma

# 1. Hepatocellular adenoma

- Adenoma arising from hepatocytes are rare
- It is associated with oral contraceptives, sex hormone therapy and with pregnancy
- Rupture causes intraperitoneal haemorrhage

## **2. Bile duct adenoma**

- It is rare
- It is intra hepatic or extra hepatic bile duct adenoma

## **3. Haemangioma**

- Commonest benign tumor of the liver
- Blood filled

# Malignant Hepatic tumors

## **1. Hepatocellular carcinoma (hepatoma)**

### Etiopathogenesis

1. HBV infection
2. HCV infection
3. Cirrhosis
4. Alcohol (with HBV and HCV infection)
5. Mycotoxins
6. Chemical carcinogens



## 7. Miscellaneous factors

- Haemochromatosis
- Tobacco smoking
- Viral hepatitis
- Alpha 1 anti trypsin deficiency
- Pancreatic infections

- **Morphological features**

- 1. **Expanding type**

- It forms single, yellow brown, large mass
    - Most often in right lobe of liver the central necrosis
    - Occasional bile staining

## 2. Multifocal type

- Multiple masses 3-5cm in diameter
- Scattered throughout the liver

## 3. Infiltrating ( spreading type)

- diffusely ,infiltrating tumor mass

- **Microscopically**

- Tumor cells have tendency to invade and grow along blood vessels

- **Clinical features**

- Weight loss

- Loss of appetite

- Pain under right costal margin

- Blood stained ascites

- splenomegaly

# Carcinoma of Gall bladder

- Cancer of gall bladder is the most common malignancy of the extra hepatic biliary tract
- Risk factors
  - Gall stone
  - Chemical carcinogen ( pesticides , nitrosamine, worker engaged in rubber industry)
  - Genetic factor

- **Clinical features**

- Abdominal pain

- Jaundice

- Anorexia

- Nausea

- vomiting

- **Morphology**

- Cancer of gall bladder show two patterns of growth infiltrating and exophytic. the infiltrating type is most common
- Deep ulceration can cause direct penetration of the gall bladder wall or fistula formation to adjacent viscera into which neoplasm can grown.



- Tumor has very firm consistency
- The most common site of involvement is fundus and the neck.
- Most carcinomas are adenocarcinomas

## Types

1. Fungating type
2. Infiltrating type

# Pancreatic carcinoma

- **Cause**
- Cigarette smoking
- Consumption of diet rich in fat and obesity
- Chronic pancreatitis
- Diabetes mellitus
- Genetic factor
- Alcoholism
- Chemical carcinogen

- **Clinical features**

Carcinoma of pancreas remain silent until they invade into adjacent structures.

-Pain

- Jaundice

- Weight loss

- Anorexia

- Weakness

- Splenomegaly ( due to splenic vein obstruction )

- G.I bleeding

Thank you