

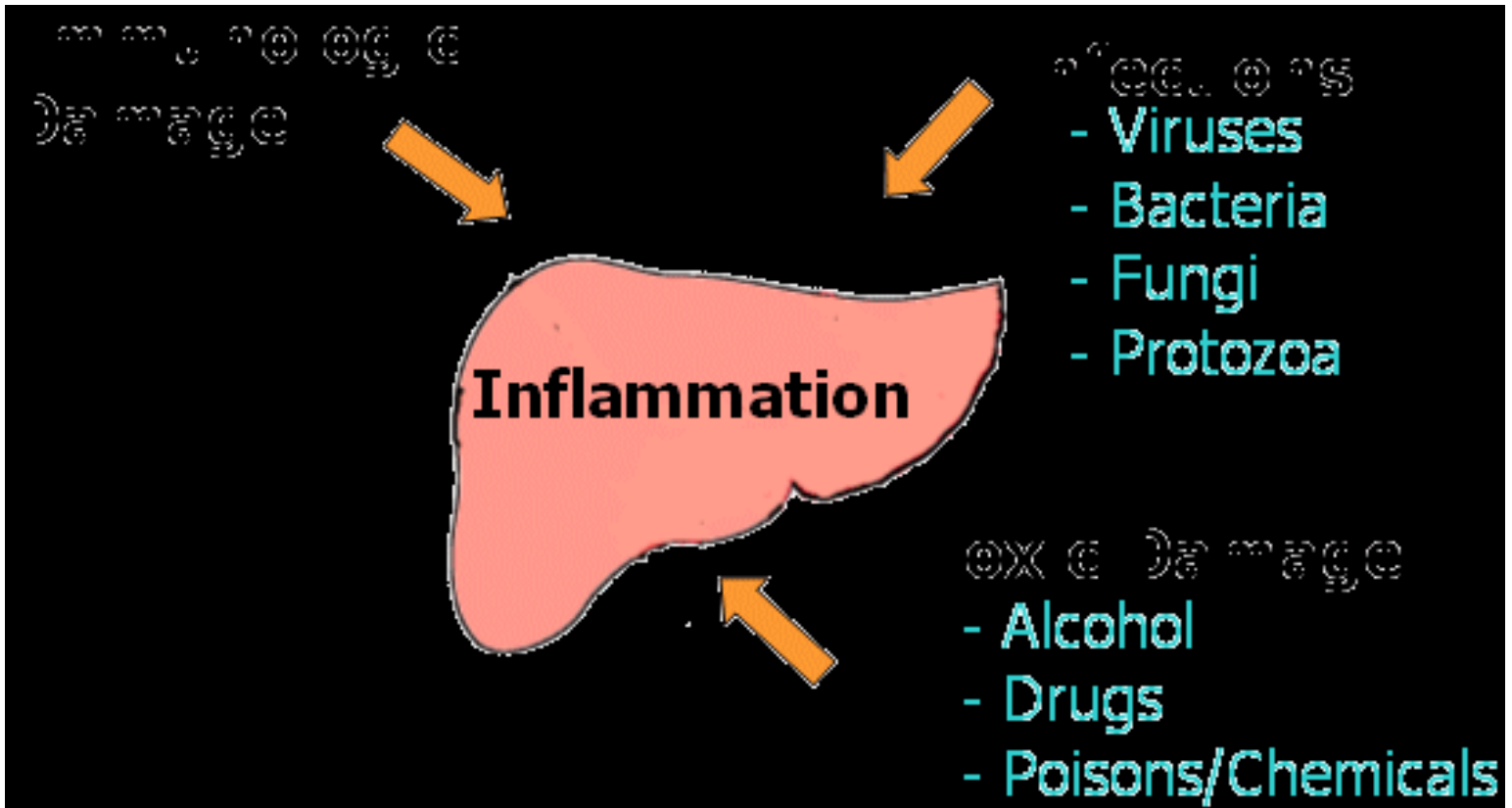
HEPATITIS



by

Osama Wredat

HEPATITIS = inflammation of liver



Viral Hepatitis

5 types:

A: fecal-oral transmission

B: sexual fluids

C: blood to blood

D: travels with B

E: fecal-oral transmission

**Vaccine
Preventable**



HEPATITIS - causes

- ACUTE:

- Viral hepatitis
- Non-viral infection
- Alcohol
- Toxins
- Drugs
- Ischemic hepatitis
- Autoimmune
- Metabolic diseases

- CHRONIC:

- Viral hepatitis
- Alcohol
- Drugs
- Non-alcoholic steatohepatitis
- Autoimmune
- Heredity

HEPATITIS - symptoms

- ACUTE:

- Malaise
- Muscle and joint ache
- Fever
- Nausea or vomiting
- Loss of appetite
- Abdominal pain
- Dark urine
- Jaundice


- CHRONIC:

- Malaise, tiredness, weakness
- Weight loss
- Peripheral oedema
- Ascites

Hepatitis A

- **Transmission:** faecal-oral
- **Incubation:** 2-6weeks
- **High-risk countries:**
Eastern Europe, Africa, Asia, South America
 - In these regions almost every child comes into contact with the hepatitis A virus before the age of 10
- The proportion of symptomatic forms and complications increase with age



- 
- **Prevention:** hygienic measures
 - passive immunization (gives <3 months immunity to those at risk)
 - active immunization
 - **Treatment:** nospecific, dietary food and long rest
 - **CHRONIC LIVER DISEASE DOES NOT OCCUR!**

Hepatitis B:



ACUTE




CHRONIC- 5-10%
(infection >6months)

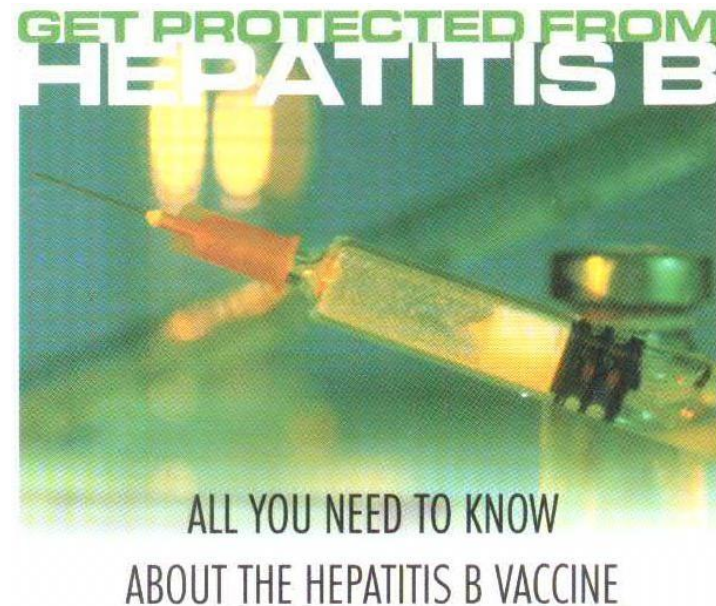
- Every year 1 to 2 million people die due to an infection by this virus



complications of chronic hepatitis

- 
- **Transmission:** blood and body fluids, iv drug abusers, sexual transmission
 - **Incubation:** 1-6 months
 - Hepatitis B virus primarily interferes with functions of the liver by replicating in liver cells
 - During HBV infection, the host immune response causes both hepatocellular damage and viral clearance

- **Prevention:** vaccination
- **Treatment:** chronic- PAginterferon-2 α , antiviral drugs (lamivudine...)



Hepatitis D

- Subviral satellite because it can propagate only in the presence of hepatitis B

coinfection

superinfection

- **Transmission:** parenteral (intravenous drug use mostly)
- > 60% develop cirrhosis

Hepatitis C



```
graph TD; A[Hepatitis C] --> B[ACUTE]; A --> C[CHRONIC 50-80%];
```

ACUTE

first 6 months after infection

60-70% asymptomatic

most patients develop chronic
HCV


CHRONIC 50-80%

more than 6 months

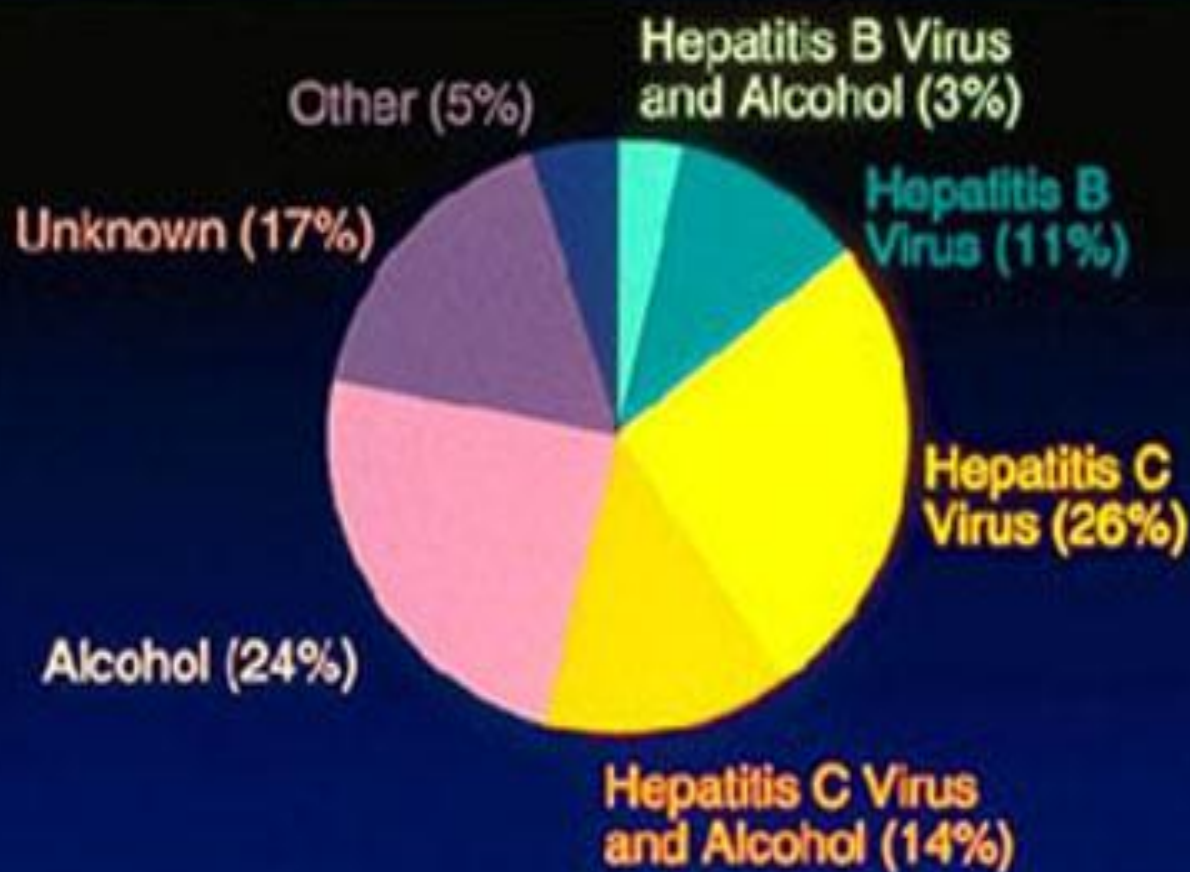
often asymptomatic

1/3 progress to cirrhosis in 20y

- Infects 3-4 million people per year

- 
- **Transmission:** blood
 - **Incubation:** 2weeks - 6months
 - No vaccine!
 - 35% of patients infected with HIV are also infected with hepatitis C virus

Primary Causes of Chronic Liver Disease*



*Jefferson County, Alabama, USA

Alcoholic hepatitis

- Major cause of liver cirrhosis in the Western world

