The ABC of viral hepatitis

Viral hepatitis is an inflammation of the liver due to a viral infection.

**3 MAIN VIRAL TYPES**

**HAV**
- Hepatitis A virus
- Ingestion of contaminated food and water
- Direct contact with an infected person
- An acute infection that does not have a chronic stage
- 1.4 million new infections per year
- Prevention: Improved hygiene
- Treatment: No available treatment

**HBV**
- Hepatitis B virus
- Contact with infected body fluids
- Mother-to-child transmission
- Infected blood or organ transfer
- Chronic infection can lead to cirrhosis and liver cancer
- 257 million chronic carriers
- Prevention: Vaccination, Blood screening, Improved hygiene
- Treatment: Nucleos(t)ide analogs, Pegylated interferon

**HCV**
- Hepatitis C virus
- Intravenous drug use
- Poorly sterilised medical equipment
- Blood transfusion or organ transplant
- Chronic infection can lead to cirrhosis and liver cancer
- 130-150 million chronic carriers
- Prevention: Blood screening, Sterile needles for drug injections, Sanitary healthcare settings
- Treatment: Direct-acting antiviral agents (with or without pegylated-interferon and ribavirin)

**TRANSMISSION EPIDEMIOLOGY**

**MAIN VIRUS TYPES**

- For blood screening: PCR* test to detect the virus RNA
- First line diagnostic tests: Detection of HBV surface antigen (HBsAg) and antibodies to core antigen (anti-HBc)
- Depending on results, followed by detection of e-Antigen, HBV e antigen (HBeAg) and liver enzymes; PCR test for HBV DNA
- Detection of HCV-specific antibodies (anti-HCV) and liver enzymes in the blood
- PCR test for virus RNA to confirm chronic infection

**SYMPTOMS**

- FEVER
- FATIGUE
- LOSS OF APPETITE
- NAUSEA
- ABDOMINAL PAIN
- JOINT PAIN
- JAUNDICE

It is not possible to differentiate the viral hepatitis types based on symptoms alone:

Laboratory testing and follow up is essential for diagnosis of viral hepatitis.

**PREVENTION & TREATMENT**

**DIAGNOSIS**

**SOURCES:**
- http://www.who.int/topics/hepatitis/en/
- https://www.cdc.gov/hepatitis/

*PCR: Polymerase chain reaction