Liver 2

Hepatitis A (RNA virus)

- Spread
  - Faecal-oral route
  - Often in travellers / institutions
- Incubation
  - 2 - 6 weeks
- Symptoms & Signs
  - Prodrome
    - Fever, malaise, anorexia, nausea, arthralgia
    - Jaundice +/- hepatosplenomegaly
- Tests
  - Serum transaminases rises 3 weeks after exposure
  - IgM rises from day 25; IgG remains detectable for life
- Management
  - Prevention
    - Passive immunisation
      - Human Ig gives upto 3 months immunity to those at risk (travellers, household contacts)
    - Active immunisation
      - I year immunisation; extended to 10 years after 6 months booster
  - Treatment
    - Symptomatic relief
- Prognosis
  - Usually self limiting
  - Fulminant hepatitis occurs rarely; chronic liver disease does not occur

Hepatitis C (RNA flavivirus)

- Spread
  - Blood; IVDU; sexual; acupuncture
- Course
  - Early infection is often mild / asymptomatic
  - 85% develop chronic infection; 25% develop cirrhosis; a few get hepatocellular cancer
- Tests
  - LFTs; anti-HCV antibodies; HCV-PCR
  - Liver biopsy if HCV-PCR +ive to assess liver damage
- Management
  - Interferon alpha & ribavirin in chronic infection
  - Interferon alpha in acute stage may reduce progression to chronic disease

Hepatitis B (DNA virus)

- Spread
  - Blood products, IVDU, sexual intercourse, direct contact
- Risks
  - At risk groups
    - IVDU & sexual partners; health workers; haemophiliacs
    - Haemodialysis; sexually promiscuous; close family members of carriers; staff of long term institutions
  - Endemic in
    - Far East, Africa, Mediterarranean
- Incubation
  - 1 - 6 months
- Symptoms & Signs
  - Resembles hep A
  - Extra hepatic features are more common
- Tests
  - Antigens
    - HBsAg
      - Surface
        - Present 1 - 6 months after exposure
        - Persistent for 6 months implies carrier status
    - HBcAg
      - Core
    - HBeAg
      - DNA material
        - Present after acute illness
        - Implies high infectivity
  - Antibodies
    - Abs
      - Implies vaccine or previous infection
    - Abc
      - Implies previous infection
- Management
  - Vaccination
    - May be universal or for high risk groups
    - Passive immunisation may be given following high risk exposure
    - Given HBsAg to allow body to produce Abs
  - Treatment
    - Supportive
    - Avoid alcohol
- Complications
  - Fulminant hepatic failure (rare); relapse; prolonged cholestasis; chronic hepatitis (10%); cirrhosis; hepatocellular carcinoma (upto 60 x increased risk)