



# *HEPATITIS B IN PREGNANCY*

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# *OUTLINE*

- ◆ Definition
- ◆ Incidence
- ◆ Diagnosis
- ◆ Management principle



# HEPATITIS B

## ■ Definition

- ◆ Hepatitis B is a DNA hepadenavirus
- ◆ It is the major cause of acute hepatitis as well as causing chronic hepatitis, cirrhosis and hepatocellular carcinoma

## ■ Incidence

- ◆ 2 in 1000 pregnant women
- ◆ Chronic infection occurs in 5-10% of infected adults and 70-90% of infected infants
- ◆ Found most often among drug abusers, homosexuals, health care professionals and in Blood product recipients
- ◆ Sexually transmitted disease



## HEP B AND PREGNANCY

- ◆ The course of hepatitis B does not seem to be altered by pregnancy
- ◆ Hepatitis in pregnancy is not associated with increased abortion rate, lower birth weights, stillbirth or congenital malformation
- ◆ Treatment is supportive
- ◆ Transplacental infection is rare



## *CONT'D.*

- ◆ Perinatal transmission is common, 10-20%, 90% in presence of HBeAg higher (if acute Hep B in pregnancy)
- ◆ 85-95% transmission occurs at time of delivery
- ◆ Breastfeeding may transmit
- ◆ Over 85% of infants will become chronic carriers and be infective



## CONT'D.

### ■ Diagnosis

- ◆ Cannot be cultured in vitro, diagnosis depends on serology for a/b and antigens
- ◆ HBsAntigen (HbsAg)
- ◆ Found in serum of infected patients, is the first marker of infection
- ◆ HBsAntibody (AntiHBs)
- ◆ Found after recovery from acute HBV and as response to vaccine
- ◆ Protective against subsequent infection



## *CONT'D.*

- ◆ Not found in chronic infection (carrier state)
- ◆ HBe Antigen (HBeAg)
- ◆ Correlates with infectivity and the presence of intact viral particles
- ◆ High risk of active liver disease
- ◆ May be present in early infection, however its persistence indicates chronic infection.
- ◆ Important since this correlates with neonatal infection



## CONT'D.

### ■ Management

- ◆ All women should be screened antenatally for Hep B
- ◆ If positive then check HbeAg for infectivity risk
- ◆ Give infant at delivery immunoglobulin and vaccination
  - ⊕ HBIG 0.5mL (100IU) IM within 12 hrs of birth
  - ⊕ HB vaccine 0.5mL at same time or within 1 week
  - ⊕ Allow to breastfeed if immunoprophylaxis given
  - ⊕ Repeat vaccination is given at 1 and 6 months
  - ⊕ Check infant HbsAg and antiHBs at 12 months old
  - ⊕ Neonatal infection not prevented in 5-10%
  - ⊕ For high risk mothers who are antigen negative, vaccination can be given in pregnancy

