

PROJECT PRAKASH

KEY LEARNING POINTS

Training: Hepatitis Induction Program

Topic: Viral Hepatitis in Pregnancy

Faculty: Ms. Anugrah Milton, HOD, OBG, RAKCON

Period: 2021 - 2022

Attendees: In-Service Nurses

- ✚ Viral hepatitis is the commonest cause of jaundice in pregnancy.
- ✚ Hepatitis is mostly restricted to the ill-nourished mothers, living in unhygienic environment.
- ✚ There is also increased incidence of its affection in the pregnant state compared to the non-pregnant one.

Viral Hepatitis in Pregnancy - Overview

HAV	HBV	HCV	HDV	HEV
<ul style="list-style-type: none"> • Severity of disease increases with advancing gestational age. • Following complications are seen; • Preterm labour • Placental abruption • PROM (Premature rupture of membranes) 	<ul style="list-style-type: none"> • Risk of transmission to fetus ranges from 10% in first trimester to as high as 90% in third trimester. • Neonatal transmission mainly occurs at or around the time of delivery through mixing of maternal blood and genital secretions. • Approximately 25% of the carrier neonate will die from cirrhosis or hepatic carcinoma. • Screening <ul style="list-style-type: none"> ○ All pregnant women should be screened for HBV infection at first antenatal visit. ○ It should be repeated during the third trimester for "high risk" groups. 	<ul style="list-style-type: none"> • Perinatal transmission is 3-6%. • Perinatal transmission (10-40%) is high when viral load is high and presence of coinfection with HIV and HBV. • Course of illness in pregnancy <ul style="list-style-type: none"> ○ HCV is usually milder than HAV and HBV, but it leads to chronic infection (70%) and cirrhosis (20%). ○ Probability of liver failure is 18%. 	<ul style="list-style-type: none"> • Perinatal transmission is known. • Chronic carrier state is seen. • Neonatal immunopropylaxis for HBV is almost effective against HDV. • Acute infection with fulminant course results in high maternal mortality (2-20%) due to hepatic failure. 	<ul style="list-style-type: none"> • May lead to fulminant hepatitis. • Chronic carrier state is present. • Perinatal transmission is uncommon. • Maternal mortality following acute infection is high (15-20%).

Prognosis

<p>Maternal:</p> <ul style="list-style-type: none"> • There is increased incidence of postpartum haemorrhage, hepatic coma, renal failure, coagulopathy, infection and hepatorenal syndrome. 	<p>Fetal:</p> <ul style="list-style-type: none"> • There is increased incidence of abortion, preterm birth and intrauterine death leading to increased fetal wastage. • Perinatal mortality is about 20-70%.
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- All these lead to increased maternal morbidity and mortality.
- Medical termination of pregnancy does not alter the prognosis of the patient.

Prophylaxis

Pregnant Women	Infant
<ul style="list-style-type: none"> • HBV infection can be prevented by vaccination and the recombinant vaccine is safe in pregnancy. • Pregnant woman who is seronegative, should have HB immunoglobulin (HBIG), 0.06 ml/kg IM, soon following exposure and a second dose after 1 month. 	<ul style="list-style-type: none"> • All infants born to HBsAg positive mothers should have HBIG 0.5 ml IM within 12 hours of birth. • Active immunization with HB vaccine (0.5 ml) is also given IM at a separate site at the same time schedule • Breastfeeding is not contraindicated.

- + Similar to HIV, perinatal transmission of HBV depends on maternal viral load.
- + Lamivudine and HBIG are effective to reduce the transplacental transmission of HBV to the fetus.
- + Lamivudine is given 150 mg/day from 34 weeks.

+ Management during Pregnancy

- There is no specific treatment. It is generally supportive.
- **Rest:** The patient should be put to bed rest.
- **Isolation:** The patient should be kept in isolation.
- Ensure adherence to infection prevention and control guidelines
- **Nutrition:** Diet rich in carbohydrate and protein. If the patient cannot tolerate oral feeding, 10% glucose may be given intravenously.
- **Drugs:** To prevent formation of the toxic nitrogenous compound from the bacterial flora of the gut, oral neomycin (1 gm to be given 6 hourly) is helpful.
 - Lactulose (15–30 ml three times daily), reduces colonic ammonia absorption and it acts as an osmotic laxative.
 - Hepatotoxic drugs should not be used.
 - There is no place for termination of pregnancy.

+ Prevention of complications:

- Hypokalemia, hypoglycemia and hypocalcemia are corrected by regular blood checkup.
- Hemorrhagic complications are managed by giving blood or fresh frozen plasma.

+ Management during Labor:

- Hepatotoxic drugs should be avoided.
- To administer vitamin K, 5 mg intramuscularly to raise the prothrombin level
- Prophylactic oxytocin is to be given.
- Hepatologists to be involved.
- Patient may need ICU management depending on liver function tests.
