HEPATIC DISORDERS DURING PREGNANCY

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Objectives:

- INTRAHEPATIC CHOLESTASIS OF PREGNANCY
- ACUTE FATTY LIVER OF PREGNANCY
INTRAHEPATIC CHOLESTASIS OF PREGNANCY

• Pathogenesis of intrahepatic cholestasis of pregnancy (ICP) is not known. ? Hormonal

• Characterized:
  1. cholestasis and pruritus in the second half of pregnancy without other major liver dysfunction
  2. a tendency for recurrence with each pregnancy,
  3. an association with oral contraceptives and multiple gestations
  4. a benign course in that there are usually no maternal hepatic sequelae.
  5. increased rate of meconium-stained amniotic fluid and 
     fetal demise.
INTRAHEPATIC CHOLESTASIS OF PREGNANCY

• Prevlance is less than 1% of pregnant.
• Higher in latin population up to 6%.
• The etiology of ICP is most likely multifactorial. A mutation in the MDR3 gene may be associated with up to 15% of cases.
Symptoms of ICP

• Itching (most intense on the palms and soles), without abdominal pain or a rash, which may occur as early as 20 weeks’ gestation.

• elevated levels of serum bile acids.

• Serum levels of bilirubin and liver enzymes (e.g., aspartate and alanine transaminase) are usually normal ➔ may be mildly elevated

• Jaundice is rarely
Investigations:

- A hepatitis screen to exclude viral hepatitis and an autoantibody screen for primary biliary cirrhosis.

- Abdominal ultrasonography.
Treatment and Follow-up

- Symptomatic treatment.
- Cold baths, emollients, and antihistamines.
- Ursodeoxycholic acid.
- The reason for the increased rate of fetal demise is unclear usually after 37 weeks.
Treatment and Follow-up

- Serial fetal surveillance should be performed in the third trimester, with delivery at term if testing remains reassuring.

- Postpartum, maternal symptoms and bile acids usually normalize quickly.
ACUTE FATTY LIVER OF PREGNANCY

• Rare but extremely serious complication that can occur in the third trimester of pregnancy.

• The incidence is about 1 per 14,000 pregnancies.
ACUTE FATTY LIVER OF PREGNANCY

- It is associated with diffuse microvesicular fatty infiltration of the liver, resulting in hepatic failure.
ACUTE FATTY LIVER OF PREGNANCY

• The cause is unknown.

• However it occurs because of a deficiency of long-chain 3-hydroxyacyl-coenzyme A dehydrogenase (LCHAD).
Presentation:

• Variable

• Abdominal pain, nausea and vomiting, jaundice, and increased irritability.

• Extreme polydipsia or pseudodiabetes insipidus may be present.

• Hypoglycemia is frequently present and can be severe.
Presentation:

• Hypertension and proteinuria are present in approximately 50% of patients, raising the issue of coexisting preeclampsia.

• Patients can develop coagulopathy with intraabdominal hemorrhage, hepatic coma, and renal failure.
Diagnosis and Investigations

- Liver biopsy is diagnostic → usually not done.
- Other causes of liver failure should be ruled out, especially pre-eclampsia with HELLP syndrome.

- PT and APTT
- Uric acid, bilirubin, ammonia, liver enzymes and BUN.
Treatment:

• Prompt delivery and intensive supportive care.
• Providing supportive measures:
  ① Admission to ICU.
  ② Intravenous fluids with 10% glucose
  ③ FFP or cryoprecipitate should be given along with platelets and packed red blood cells if there is DIC.
Prognosis and outcome:

• The disease can recur in subsequent pregnancies.
• The woman and her neonate be tested for an LCHAD defect.
• Maternal mortality is about 7-18%.
• Fetal mortality about 9-23%.
• In those who survive, recovery is complete, with no signs of chronic liver disease.