

Chapter 19

Pregnancy and Gastrointestinal Disorders



What is observed as a result of gastro-intestinal system (GIS) smooth muscle relaxation with progesterone?

- Reduced intestinal motility
- Reflux esophagitis
- Decreased gastric acid secretion, increased mucus secretion
- Increased gastric volume

Which changes can be observed on the laboratory findings in hyperemesis gravidarum (HG)?

- Prerenal azotemia due to severe dehydration
- Hypokalemia due to hydrochloric acid loss
- Hyponatremia, hypocalcemia
- Ketonemia, ketonuria
- High creatinine level
- Hyperbilirubinemia and deterioration in liver function tests

What are the complications of HG?

- Mallory Weiss tears/lacerations
- Vitamin K deficiency (coagulopathy, epistaxis)
- Wernicke's encephalopathy (due to thiamine deficiency)

What is the treatment of hyperemesis gravidarum?

- Fluid-electrolyte replacement
- Dietary recommendations
- Ginger

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- Pharmacological treatment
 - Vitamin B6 + doxylamine
 - Antiemetics (promethazine, chlorpromazine, metoclopramide; if necessary ondansetron)
- Hospitalization

What are the recommendations for the treatment of gastroesophageal reflux (GER)?

- Adjustment of maternal head position
- Antacids
- Histamine H₂-receptor antagonists (H₂ receptor blockers)
- Proton pump inhibitors (PPI)

What are the most common causes of abdominal surgery during pregnancy?

Explain.

- The frequency of appendicitis in pregnancy does not increase, even decreases. However, it is difficult to diagnose because the appendix changes its position.
- Therefore, complication rates and mortality increase.
- Especially in the last trimester the risk of perforation is much higher.

What are the main features of the intrahepatic cholestasis of pregnancy?

- Itching is the most common symptom, especially occurs in the third trimester and then jaundice develops.
- Hyperbilirubinemia is moderate (<4–5 mg/dL).
- AST, ALT, and LDH levels are elevated.
- ALP is elevated.
- Bile acid levels increase by tenfold.
- The exact cause is unknown.
- Preterm delivery, meconium staining of amniotic fluid, fetal demise.
- More common in second trimester, the risk increases near term.
- Deliver at 38th week.

Explain the treatment of intrahepatic cholestasis of pregnancy.

- Antihistamines
- Cholestyramine (bile acid-binding resin)
- Phenobarbital
- Dexamethasone
- S-Adenosyl methionine
- Ursodeoxycholic acid (UDCA) relieves pruritus, but a favorable effect on fetal/neonatal outcome has not been demonstrated.
- Itching disappears 3–7 days after birth

What are the main features of the acute fatty liver (AFL) of pregnancy?

- The most common cause of acute hepatic failure in pregnancy.
- Although the cause is not known, sometimes “3OH acyl coenzyme A dehydrogenase” deficiency may be detected.

- There are fat micro vesicles, small collections of *fat* within the *liver* cells.
- No tendency to recur.
- Nulliparity, multiple pregnancy, and male fetus are factors related with increased risk.
- Occurs in the third trimester or early postpartum period.
- Consider in unexplained liver failure near term.
- It often accompanies signs and symptoms of preeclampsia, and its clinic presentation can be very similar to HELLP syndrome especially.
- Hypoglycemia and hepatic coma may develop rapidly.
- The definitive treatment is delivery.
- If no complications are developed, no sequel is expected.

What is the prognosis of acute fatty liver (AFL) in pregnancy?

- Maternal mortality rates may reach to 75%.
- Fetal mortality is about 90%.

Which type of hepatitis have worse prognosis in pregnancy?

- Hepatitis E

What should be given to the newborn to HbsAg-positive mother?

- Hepatitis vaccine (to every baby) and hepatitis immunoglobulin (within 12 h of *birth*)

Suggested Reading

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7. Chappell LC, Bell JL, Smith A, Linsell L, Juszczak E, Dixon PH, Chambers J, Hunter R, Dorling J, Williamson C, Thornton JG. Ursodeoxycholic acid versus placebo in women with intrahepatic cholestasis of pregnancy (PITCHES): a randomised controlled trial. Lancet. 2019;394(10201):849–60. [https://doi.org/10.1016/S0140-6736\(19\)31270-X](https://doi.org/10.1016/S0140-6736(19)31270-X).