

Watch the following video: <https://youtu.be/CRhGx8A7Dqg?si=TLWwkHL28qt76JSg> Answer the following questions:

1. *What underlying placental abnormalities contribute to both preeclampsia and eclampsia?*
  - a. Abnormal placenta development
    - i. Spiral arteries dilate 5-10x normal size and develop into large uteroplacental arteries that deliver large quantities of blood to the fetus
    - ii. In preeclampsia:
      1. The spiral arteries become fibrous, narrow, & deliver less blood to the placenta → intrauterine growth restriction & fetal death
        - a. Release pro-inflammatory proteins, go into circulation, endothelial cells become dysfunctional & cause vasoconstriction & kidneys retain more salt, resulting in HTN
2. *What is the timing of preeclampsia in pregnancy?*
  - a. After 20wks gestation and up to 6 wks after delivery
3. *What are the risk factors that predispose individuals to preeclampsia and eclampsia?*
  - a. 1<sup>st</sup> pregnancy
  - b. Multiple gestations
  - c. Maternal age >35YO
  - d. HTN
  - e. Diabetes
  - f. Obesity
  - g. Family Hx of preeclampsia

**4. What are the main clinical signs of severe preeclampsia—and how do they differ from eclampsia?**

- a. New onset HTN and proteinuria, brain & liver damage
  - i. >140/90
  - ii. Severe: >160/110
    - 1. Lead to hemorrhagic stroke or placental abruption
  - iii. Local vasospasm
    - 1. Oliguria & proteinuria
    - 2. Retine issues
    - 3. Liver injury & swelling: elevated LFTs. Referred epigastric pain
  - iv. Formation of thrombin: hemolysis & more permeable vessels leading to edema and fluid overload
    - 1. HELLP
      - a. Hemolysis
      - b. Elevated
      - c. LFTs
      - d. Low
      - e. platelets
- b. Eclampsia = preeclampsia **AND** seizures

**5. Why is delivery ultimately considered the only “cure” for preeclampsia and eclampsia, and what are the key considerations involved?**

- a. Induce: depends on gest. Age & severity of disease

- b. Onset after delivery:
  - i. Manage symptoms that subside on own
- c. Supplemental O2
- d. Meds to manage stroke or placental abruption