Amniotic Fluid Embolism/ Maternal Mortality

a. What are two commonest causes of direct maternal death in latest Mothers and babies: Reducing risk through Audits and Confidential Enquiries across Uk (MBRACE UK) report 2018?

- Thrombosis / Thromboembolism.
- Suicide.

b. What is the leading cause of indirect maternal death in the latest (MBRACE UK) report 2018?

- Cardiac disease.

c. AFE is a direct cause of maternal mortality. How does it present clinically?

- Sudden and profound catastrophic collapse either during labour, Caesarean section or after delivery.
- CVS and respiratory collapse:
  1. Raised pulmonary vascular resistance
  2. Acute right heart failure
  3. Hypoxemia
  4. Direct myocardial depression due to hypoxemia
  5. LVF
  6. Pulmonary oedema
  7. Hypotension
  8. ARDS in survivors.
- Disseminated intravascular coagulation: Massive H’hage
- Neurological: seizures and loss of consciousness.

d. What are possible obstetrics and non-obstetrics differential diagnosis?

- Obstetric D/D
  
  1. Eclampsia
  2. Sepsis (genital and pregnancy related infections)
  3. Thrombosis
  4. Peripartum cardiomyopathy
  5. Placental abruption

- Non Obstetrics D/D
  
  1. Anaphylaxis
  2. Sepsis (Pneumonia, Influenza)
  3. LA toxicity
  5. Total spinal anaesthesia
  6. Pulmonary aspiration
  7. Pulmonary embolus
  8. Septic/ Haemorrhagic shock
e. State two possible theories on the pathophysiology of AFE?

- Emboli theory
- Immune theory
