Amniotic Fluid Embolus

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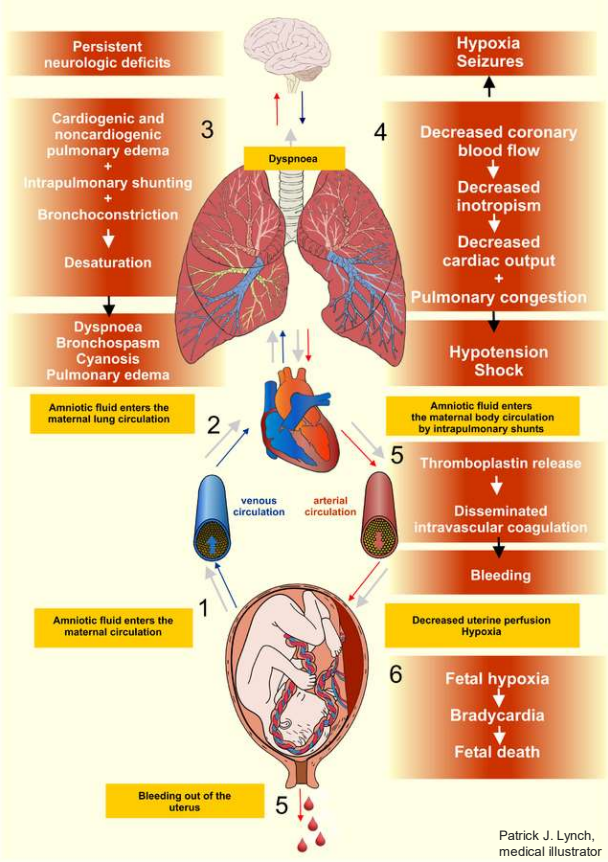
Introduction

- Amniotic Fluid Embolus (AFE) is a rare but potentially catastrophic complication of labor and delivery
- AFE presentation is characterized by sudden cardiopulmonary arrest, altered mental status, PE, DIC, and uterine atony
- Estimated to occur in approximately 1:20,000-80,000 deliveries, carrying a mortality rate of up to 80%
- Second leading cause of peripartum maternal death and primary cause of peripartum maternal cardiac arrest
- The exact pathophysiology remains unclear, however it is thought that introduction of amniotic fluid or fetal components into the maternal circulation is the trigger

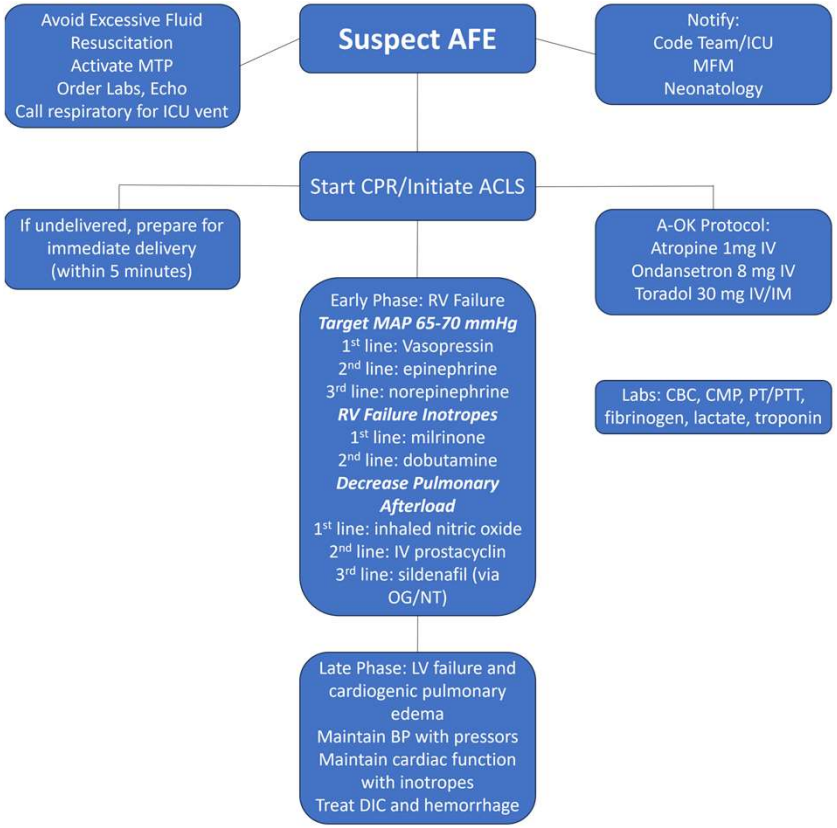


Case Presentation

- 36 yo G2P1 at 39w1d with PMH of asthma presenting for elective IOL
- Hospital day 1, the patient developed a non-reassuring fetal heart tracing, followed rapidly by the patient becoming unresponsive
- Taken for emergent cesarean delivery at which time her airway was secured
- She required escalating hemodynamic support and massive blood product administration
- Intraoperative TTE with cardiology noted RV enlargement
- After delivery of the fetus, the patient had surgical findings concerning for development of DIC secondary to a suspected AFE
- Attempts at intraoperative hemostasis were unsuccessful despite hysterectomy and consultation with general surgery for assistance
- The patient was transferred hemodynamically stable to the ICU intubated and sedated with an open abdomen, which was closed on POD#1
- Patient was extubated POD#1 and continued to improve with eventual discharge on POD#5

Discussion

- In the unresponsive obstetric patient, AFE diagnosis requires a high index of suspicion
- Treatment must consist of emergent cesarean delivery to remove aortocaval compression, securement of the airway, and rapid correction of maternal hemodynamic instability
- Protocolized resuscitation, treatments and laboratory monitoring should be implemented
- Rapid recognition and response are vital to improving outcomes in AFE



References:Kaur K, et al. Amniotic fluid embolism. J Anaesthesiol Clin Pharmacol. 2016 Apr-Jun;32(2):153-9.
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