AMNIOTIC FLUID EMBOLISM RESULTING IN SEVERE RIGHT HEART FAILURE: CLUES TO A DIAGNOSIS

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BACKGROUND

- Amniotic fluid embolism (AFE) is a feared complication of pregnancy
  - Presentation is sudden and rapidly progressive
- Differential for AFE is broad
- Often includes cardiorespiratory collapse, hemorrhage, and coagulopathy

Differential includes:

- PPH
- Eclampsia
- Uterine rupture
- Placental abruption
- Acute MI
- Shock
- Embolism

Wiseman D, Simard C, Yang SS, Koolian M, Abenhaim HA, Lipes J. Echocardiography findings in amniotic fluid embolism: a systematic review of the literature. *Can J Anaesth*. 2023;70(1):151-160.
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CASE

A 30-year-old G1P0 at 39w1d

L&D:

- Following aROM, prolonged fetal bradycardia
- Decision for urgent CD

Intra-Op:

- Transiently unresponsive, hypoxic, BP 60/42, with profound atony
- 16Ga PIV x2 & a line placed, OB MTP activated
- Plt 63, fibrinogen 126

Resuscitation:

- Total EBL 5L
- Received 5U PRBCs, 7U FFP, 20U cryo, 2 plt
- 3g fibrinogen concentrate, 3g TXA
- Taken to SICU postoperatively

Post-Op:

- TTE: severe RV dysfunction
- PAC placed
- Inotropic support with dobutamine
- Inhaled epoprostenol for RV afterload reduction

- Dobutamine weaned on PPD 2 & 3
- Inhaled epoprostenol weaned on PPD 3
- Discharged PPD 8
- TTE at 6 weeks PP showed normal RV function

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LEARNING POINTS

AFE carries a high risk of mortality in pregnancy

- ↑↑ mortality rate if unrecognized

Narrowed pulse pressure on arterial line can indicate acute RV dysfunction

TTE can be beneficial in early diagnosis of RV failure

Dobutamine and inhaled epoprostenol are safe in pregnancy and PP

Early detection and treatment may decrease risk of morbidity and mortality

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