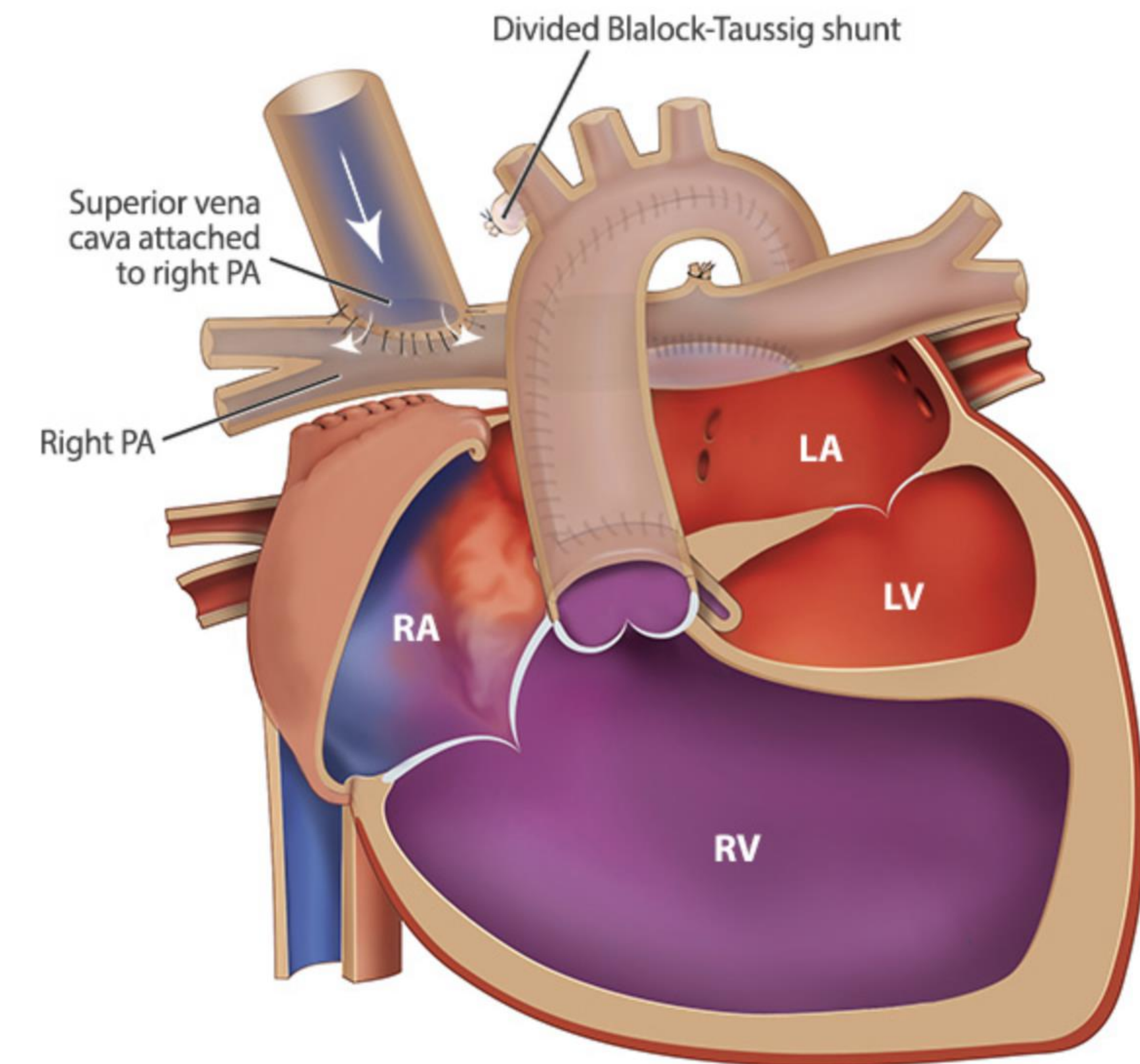


EMERGENT CESAREAN SECTION IN A PARTURIENT WITH AN UNBALANCED ATRIOVENTRICULAR (AV) CANAL DEFECT STATUS POST COMPLETE REPAIR.

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BACKGROUND

- Glenn procedure: anastomosis of the superior vena cava (SVC) to the pulmonary artery (PA) to relieve cyanosis due to congenital heart defects
- AV canal defect repair: separation of a single AV canal into proper right and left components
- Glenn physiology: passive blood flow from the SVC to PA
 - Preload dependent
 - Requires low pulmonary vascular resistance (PVR)



THE CASE

- . A 30 y/o G1P0 with congenital unbalanced AV canal defect s/p definitive repair with modified, bidirectional Glenn – SVC to right PA anastomosis and reconstructed right and left AV valves
- . ECHO: mildly reduced function, mild bilateral AV valve stenosis with moderate regurgitation.
- . Modified WHO Class was II-III. Functional status I.
- . At 37 weeks: category II FHR with persistent fetal bradycardia
- . Emergent C-section with general anesthesia (propofol, phenylephrine infusion, 5-mg boluses ephedrine, vasopressin available)
- . ETO2 maintained < 30 mmHg, PEEP limited to 5 mmHg
- . IVFs: 1200 mL of LR
- . EBL: 450 mL

LEARNING POINTS

- Pre-load dependent physiology in the setting of emergent c-section
- Potential compromise to pre-load:
 - IVC compression avoided with left uterine displacement, blood loss, PPV
 - Low dose phenylephrine primary vasopressor (SVR>PVR) - vasopressin available
- Minimize PVR: avoid hypoxia/hypercarbia
 - optimal TV, optimal PEEP (5)

