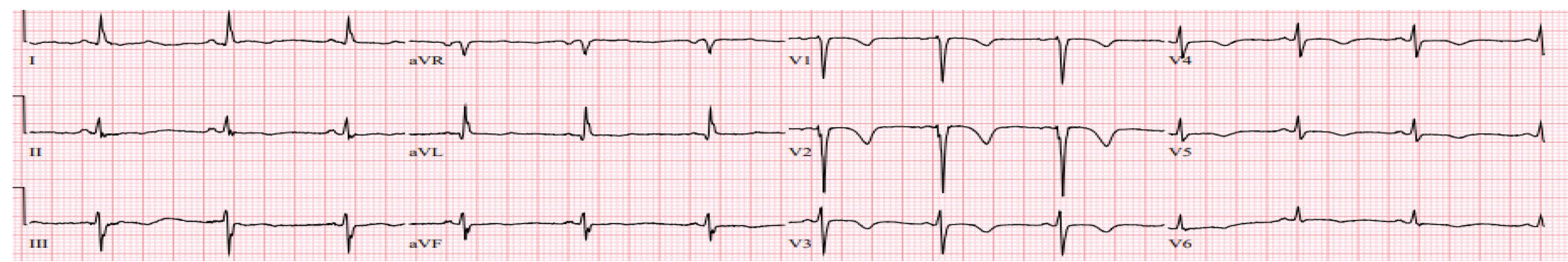


Coronary Artery Embolus-Induced Peripartum MI in Parturient with Fontan Physiology

Damon Wallace, MD, Michael Hart, MD, Lacey Straube, MD, Ben Cobb, MD
University of North Carolina – Department of Anesthesiology

Case Background

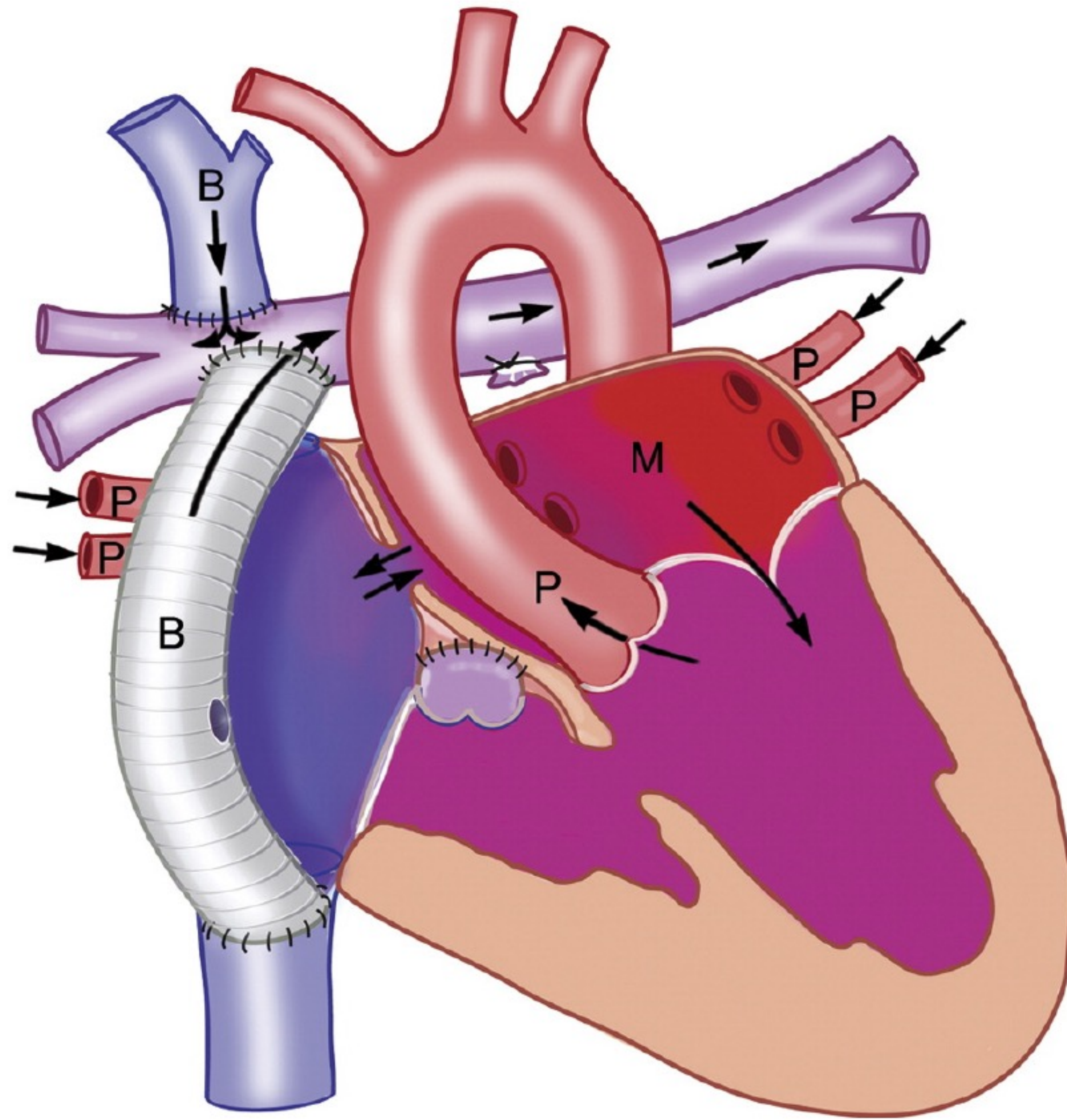
- 24yo G1P0101 @ 17w0d with tricuspid atresia s/p non-fenestrated, lateral tunnel Fontan on long-term antiplatelet therapy
 - Transitioned to ASA and enoxaparin during pregnancy
- Placenta previa diagnosed @ 15w4d – enoxaparin held at that time
- Type II MI 11 days after discontinuation of enoxaparin
 - No identified R-L intracardiac shunt at time of heart cath
 - Semi-elective termination of pregnancy under GA



	7 6/21/2021 2313	6 6/22/2021 0411	5 6/22/2021 0806	4 6/22/2021 2209	3 6/23/2021 0520	2 6/23/2021 1026	1 6/26/2021 2116
CARDIAC PROFILE							
Troponin I	5.270	8.650	8.260	3.310	2.660	2.560	0.152

Heparin gtt started

Discussion



- Corrected tricuspid atresia with Fontan circulation produces altered cardiac flow dynamics reliant on passive venous circulation
- Pregnancy increases venous stasis and hypercoagulability thereby increasing risk of clot formation
- Other pregnancy complications still pose a risk to these patients as well (previa/abruption/postpartum hemorrhage)



Summary

- Coagulation profile can be challenging to manage given the narrow balance patients must maintain² and plays a large role in hemostasis and transfusion management
- Fluid dynamics are challenging for Fontan patients and those with acute MI as they influence primary anesthetic plan (GA vs controlled neuraxial anesthesia)
- In depth risk-benefit discussions need to take place between maternal-fetal medicine, cardiology, & anesthesiology for any such patients