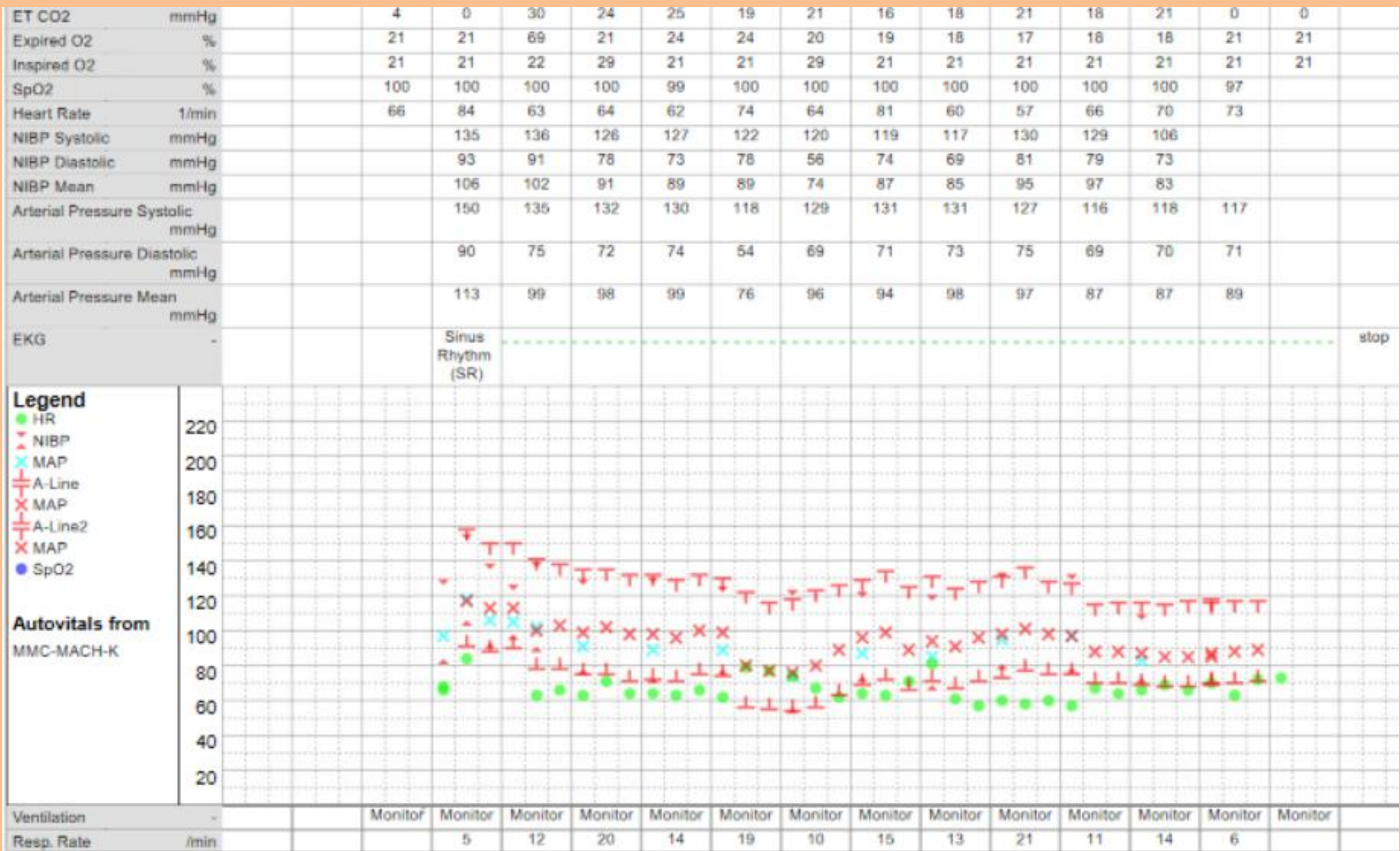


Introduction:

- **Spontaneous Coronary Artery Dissection (SCAD)** is a rare condition in which a tear in the wall of a coronary artery occurs without external forces or obvious cause. Leads to intramural hematomas and myocardial ischemia. representing 1-4% of all ACS cases, it most commonly affects young to middle aged women, and is a leading cause of MI in pregnancy and post-partum.

Objectives:

- **Create a proper anesthetic plan - Implement and manage plan under careful invasive monitoring**
- **Properly manage postpartum recovery**



Case & Plan:

- **SCAD Clinical Considerations and Presentation**
- **Pathophysiology and Risk Profile** – Non-atherosclerotic coronary pathology involving intramural hematoma or intramural tear → coronary obstruction, typically in younger peri-partum women or women with connective-tissue disorders/extreme stress
- **Presentation and Diagnosis** – presents as ACS with ST changes/troponin elevation. Coronary angiography shows long, smooth stenoses, contrast staining, and abrupt caliber changes. PCI may cause propagation of dissection, meaning that conservative management is preferred unless pt is unstable
- **Rare challenge in pregnancy** - General anesthesia is typically avoided avoided, neuraxial is preferred due to the avoidance of sympathetic surges during intubation. However, avoiding hypotension after neuraxial blockade and preventing tachycardia/hypertension from stress are essential.
- **Multidisciplinary approach** – to ensure safe delivery, we collaborated with several specialists (cardiology, OB, Cardiac anesthesia, general surgery) to ensure proper care of the patient.
- **Physiological goals** – avoid hypotension, tachycardia, and hypertension. Prevent sympathetic surges. Maintain NSR.

Preoperative assessment

32yF G2P0A1 at 37 weeks 2 days with PMH of STEMIx2 2/2 SCAD of proximal and distal LAD in 11/2024 without stent placement, multiple large fibroids (largest 9x11cm), and asthma presented for primary C-section and myomectomy.
Echo: EF 61-65%, PFO, no wall motion abnormalities

Intraoperative plan

Neuraxial Anesthesia
Combined Spinal Epidural (CSE) with low dose spinal medication and slow titration with epidural anesthesia to effect.
Radial arterial line for continuous blood pressure monitoring.
CSE dose: 0.5mL 0.75% bupivacaine + Fentanyl 15mcg.
Epidural loaded slowly to obtain satisfactory level with Lidocaine as needed
Blood loss was ~1Liter. MAP maintained above 70 to maintain coronary perfusion.

Post-op management

Admitted to cardiology service post-op to monitor for STE and changes in troponins.
Post partum period was unremarkable, patient was transferred to maternal fetal unit