

Multidisciplinary Management of a Parturient with Recent SCAD-Induced STEMI for Combined Cesarean Delivery and Myomectomy

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Case and Clinical Challenge

Patient and history

- 32 years old G2P0A1 at 37w2d
- STEMI 5 months prior secondary to SCAD of proximal and distal LAD
- Managed during pregnancy with metoprolol succinate and aspirin
- Pre-op TTE: EF 61–65% with no wall motion abnormalities
- Planned combined Cesarean delivery and myomectomy for 11 cm fibroid

Clinical goal: provide surgical anesthesia while preserving stable coronary perfusion and minimizing shear stress.

Key anesthetic concerns

- Maintain coronary perfusion pressure
- Avoid hypotension from quick onset sympathectomy
- Avoid tachycardia and catecholamine surges that may propagate dissection
- Close monitoring for bleeding and hemodynamic shifts from combined procedure

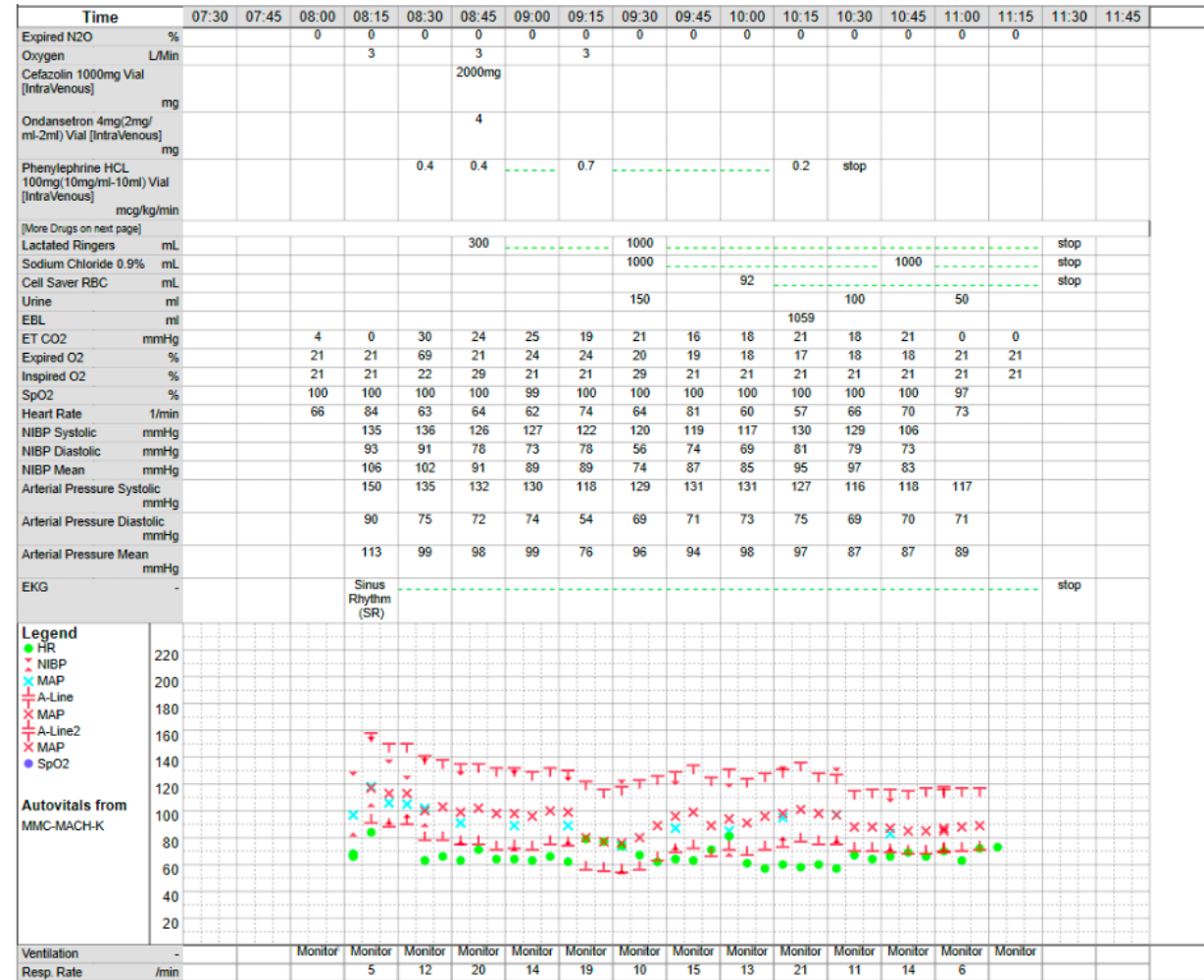
Perioperative setup

- Hybrid OR with cardiology on standby
- Radial arterial line for continuous BP monitoring

Technique

- Low-dose combined spinal-epidural anesthesia
- Spinal: 0.5 mL 0.75% bupivacaine + fentanyl 15 mcg
- Epidural: slow titration with 2% lidocaine with epinephrine
- Phenylephrine infusion and judicious fluid boluses used to support MAP

Hemodynamic target
MAP maintained >70 mmHg to preserve
coronary perfusion



Original intraoperative record included as submitted.

Why a “slow-on” neuraxial technique?

- Single-shot spinal can produce rapid sympathectomy, hypotension, and compensatory tachycardia
- In SCAD, hypotension may reduce coronary perfusion while tachycardia increases myocardial oxygen demand and shear stress
- Low-dose CSE with incremental epidural dosing allows gradual sympathectomy and tighter hemodynamic control

Key takeaways

- Arterial-line monitoring enabled continuous assessment of perfusion pressure
- Multidisciplinary planning increased safety for this high-risk combined procedure
- Postoperative CICU monitoring and recovery were uneventful
- Patient discharged on postoperative day 5 without cardiac or obstetric complications

Clinical pearl: In parturients with recent SCAD, gradual neuraxial onset plus invasive hemodynamic monitoring can help maintain coronary perfusion during cesarean delivery.