Complexities in Cesarean Section in Patient with Super Morbid Obesity

Madelyn Rabideau SAA2, Fay Horng M.D.
Department of Anesthesiology, MedStar Washington Hospital Center, Washington, DC

Background

- Limited existing guidance regarding care for parturients with BMI > 80[1,2].
- Neuraxial anesthesia has been performed successfully for C/S in patients with super-morbid obesity.
- We cared for a patient with BMI of 94 who underwent successful cesarean section (C/S) with combined spinal-epidural (CSE) technique with epidural volume expansion (EVE) to minimize post-spinal hypotension.
- Expected challenges:
  1. Long operative time
  2. Significant intraoperative blood loss
  3. Positioning challenges

Patient

- 41-year-old G1P0 at 37w3d with a BMI of 94, 264kg.
- Past medical history was significant for gestational HTN and uterine fibroids.
- Patient presented for scheduled C/S due to unfeasible FHR monitoring due to body habitus.
- Preoperative multidisciplinary planning and consultation found patient had longstanding dyspnea with walking and was able to lie flat.
- Airway examination was reassuring.

Case Report

- Two 20g IVs and radial arterial catheter placed in preoperative holding.
- Operating room bed with sufficient weight limit, bed extenders, and HoverMatt were prepared in OR.
- The patient was positioned with the support of eight staff members[1] over 30 minutes.
- Neuraxial U/S used to identify landmarks prior to CSE.
- LOR was achieved at 8 cm. Intrathecal injection of hyperbaric bupivacaine 9 mg, morphine 100 mcg, fentanyl 15 mcg, and epinephrine 100 mcg, followed by EVE with 10 ml NS for a T4 level.
- There was no uterine atony or uncontrollable blood loss. The patient was hemodynamically stable with a hemoglobin decrease from 12.2 g/dL to 11.7 g/dL with 2 L of fluid given. QBL was 3.2L. No transfusion was deemed necessary.
- Surgical time was 3.5 hours, 2.5 hours for X-ray delay

Learning Points

- Safe perioperative care for a patient with BMI 94 included preoperative planning for additional staffing, long surgical time, and hemorrhage.
- Success attributed to review of literature of high BMI OB patients and preoperative multidisciplinary planning and consultation with OB team.

- Experienced additional unexpected difficulties:
  1. Obtaining postoperative X-ray imaging
  2. Extended OR time of 6 hours
  3. Slow postoperative mobilization with the patient requiring subacute rehabilitation.

MedStar Washington Hospital Center

References
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