Positioning Super Morbidly Obese Patients for Cesarean Section Utilizing the Safe Patient Handling Mobility Team and Devices

Katelyn Scharf MD; Katherine Frampton, MS, OTR/L; Jessica Galey MD; Bhavani Kodali MBBS, MD; Shobana Bharadwaj MBBS
Department of Anesthesiology, University of Maryland School of Medicine, Baltimore, MD

Introduction

- Super-super morbid obesity (BMI ≥ 60) in pregnancy is associated with higher rates of cesarean deliveries (CD)[1] and difficulty with patient positioning, especially after spinal block.
- Use of a Safe Patient Handling and Mobility (SPHM) team and equipment can decrease healthcare worker injuries by 38%[2,3] while simultaneously improving patient satisfaction and outcomes.
- Our institution successfully changed our practice pattern by implementing a SPHM team comprised of a program coordinator, nurses, and anesthesiologists.

Case 1

- 28-year-old G4P1021 at 36w1d
- PMHx: BMI 69, gestational diabetes, preeclampsia and obstructive sleep apnea
- Elective primary CD for dichorionic diamniotic twins in the breech presentation

Case 2

- 24-year-old G4P2102 at 36w6d
- PMHx: BMI 82, mild asthma, obstructive sleep apnea, chronic hypertension
- Repeat CD given 1 prior CD

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Positioning Equipment

- OR table with sufficient weight-bearing capacity
- Bariatric bed extenders
- Ramped intubation pillow for optimal sniffing position
- 2 working ceiling lifts, each with a 550-lb weight limit
- Specialty size XXXL universal high-back sling
- Lift sheet

Positioning Technique

- High-back sling was placed under the patient prior to neuraxial procedure
- Sling's bottom edge was aligned with the patient's coccyx, leg straps were crossed through each other, and then were attached to the opposite side of the lift (**Image 1A**)
- CSE was performed using ultrasound guidance
- Following CSE, ceiling lift was used to pivot the patient with the sling (**Image 1B**) and place in supine position with left uterine tilt

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Patient Outcome

- Successful CSE was performed in both patients
- For both patients, the time between completion of the CSE and achieving the supine position with a left-uterine tilt was 6-minutes
- No issues with hypotension following CSE
- Improved patient and staff safety and satisfaction

Discussion

- After a spinal block, the patient loses the muscle tone to participate in positioning, which can be especially challenging in the super morbidly obese population.
- This can increase the time to reestablish electronic fetal monitoring and attain left uterine displacement and such a delay can lead to maternal hypotension and fetal bradycardia.
- Utilizing SPHM team members and equipment can significantly reduce this time and improve outcomes.

References

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