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CORRESPONDENCE

Mock delivery drill in a super morbidly obese parturient

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To the Editor,

There are several published reports on the anesthetic management of super morbidly obese parturients during obstetrical deliveries.[1-4] Nevertheless, to our knowledge, there are no reports on the procedural preparations required beforehand.

With appropriate institutional ethics approval and patient consent, we describe a "mock delivery" performed in preparation for the planned vaginal delivery of a 38-yr-old super morbidly obese (216 kg) G4 P0 parturient with a body mass index (BMI) of 86.5 $kg \cdot m^{-2}$. Her medical history included mild asthma, anxiety, and psoriasis. Airway examination showed a Mallampati class II airway, normal neck extension, and normal thyromental distance.

At 37 weeks gestation, the patient attended the labour and delivery ward where anesthesiology, obstetrics, and nursing performed a "mock delivery", including Cesarean delivery. After the patient's arrival in a bariatric wheelchair, the first unforeseen obstacle was obtaining an appropriately sized hospital gown, which was eventually obtained from hospital Environmental Services. We then confirmed the labour bed and the operating room (OR) table had sufficient weight-bearing capacity (i.e., 295 kg and 500 kg respectively). A mechanical ceiling lift was available in one labour room and one OR. The patient was able to position herself onto the lift-sling while it was laid out on the bed. We then confirmed that the sling and lift worked safely and comfortably while bearing the patient's weight. We made certain that appropriately sized blood pressure cuffs were available in both rooms and that they functioned given the arm diameter. The obstetrician confirmed that the leg stirrups functioned adequately for the planned vaginal delivery. The patient was then transported to the OR while in the labour bed. Using the ceiling lift, the patient was transported from the labour bed onto the operating table, which was prepared with four bariatric bed extensions and ramped intubation pillow. Once the patient was positioned on the ramped intubation pillow, it became apparent that the arm boards required significant padding to maintain her arms at a comfortable height. Additionally, her weight significantly compressed the left uterine displacement pillow negating its effectiveness. To achieve similar left uterine displacement, the bed required tilting. The obstetrical team identified the need for additional surgical equipment, which was not usually available in the delivery suite. A clearly written plan was prepared outlining the steps required for transportation of this patient, additional equipment required, and where it could be located. This plan was distributed to the departments of anesthesiology, obstetrics and nursing prior to her expected delivery date.

Unfortunately, after her "mock delivery", the patient developed gestational hypertension. Given her body habitus, a decision was made to proceed to an elective Cesarean delivery at 38 weeks, six days. Using the information from the "mock delivery", a Cesarean delivery was performed without incident using combined spinal-epidural anesthesia.

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Through the organization of a "mock delivery" in an institution such as ours (with little experience with parturients with a BMI > 80 kg·m^{-2}), we were able to identify unexpected obstacles that would have impeded the care of this super morbidly obese parturient. This allowed us to develop a plan and enabled us to prepare for, and/or minimize the majority of unforeseen events. It allowed our institution to provide safe care to this parturient and will facilitate our care of similar super morbidly obese parturients in the future. The performance of a "mock delivery" provided a safe, low-stress environment for the anesthesiologist, obstetrician, and the nursing team to identify and plan for the many steps and potential challenges that exist when a super morbidly obese parturient undergoes obstetrical delivery. In addition, by involving the patient in this process, we were able to incorporate her feedback into the delivery plan, which may have reduced her anxiety concerning the upcoming delivery.

Conflicts of interest None declared.

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