

Battling the Odds: Managing Obesity and a Scarred Uterus in Emergency Caesarean Section

AUTHOURS: LAXMI SAHA¹, HIRSI-FARAH SUAD¹, EDDYEFFIOM. J¹
¹ GEORGE ELIOT HOSPITAL NHS TRUST, O&G, NUNEATON, UNITED KINGDOM. EP 1107



BACKGROUND

Morbid obesity (BMI ≥ 40) and prior caesarean deliveries independently increase maternal and perinatal morbidity, including anaesthetic complications, longer operative time, and wound issues.^[1,2] Emergency caesarean sections (CS) in such patients require tailored surgical and anaesthetic planning. This case exemplifies the critical role of multidisciplinary coordination in achieving safe outcomes.

OBJECTIVE

To present the anaesthetic and surgical complexities during an emergency CS in a morbidly obese woman with a previous CS and highlight techniques to mitigate maternal-fetal risk.

CASE SUMMARY

Patient Characteristics

Age: 35 years
Gravida/Para: G3 P2
BMI: 60
Medical History: GDM, FGR, previous emergency LSCS
Anaesthetic History: Difficult spinal, wound infection

Intraoperative Challenges

Anaesthetic

- Challenging airway due to high BMI
- Reduced spinal anaesthesia efficacy
- Heightened risk of cardiopulmonary compromise
- Required ultrasound-guided neuraxial approach and readiness for general anaesthesia⁵

Surgical

- Difficulty in exposure due to panniculus and adhesions
- Extended operative duration
- High risk of wound complications⁴
- Prior difficult LSCS with increased technical complexity

Innovation: Use of Panniculus Retractor

Application of a dedicated panniculus retractor:

- Improved operative visualisation and access
- Reduced need for manual retraction
- Enhanced ergonomics and efficiency
- Potential reduction in wound complications⁵

Outcome

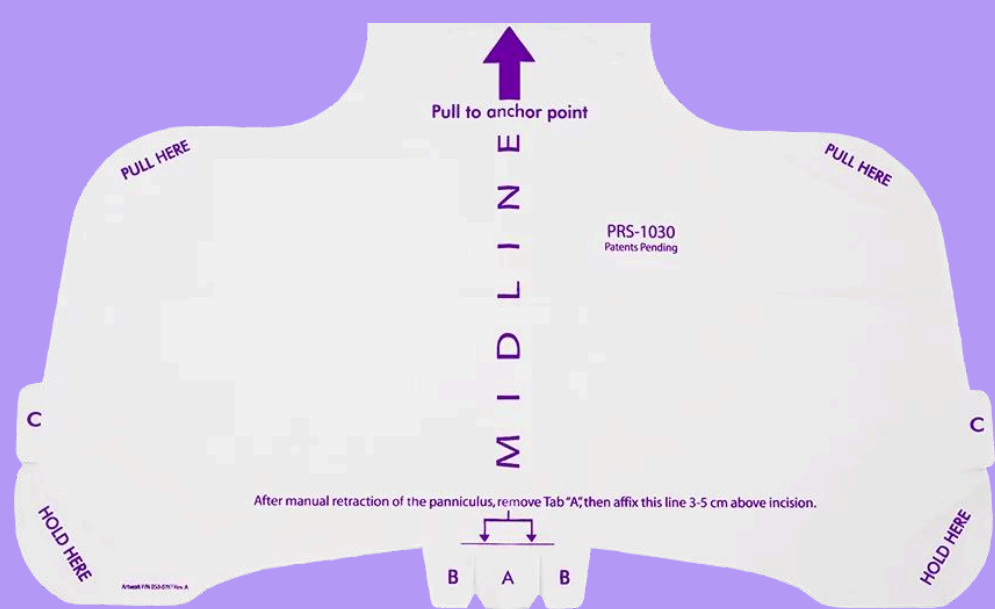
- Neonate: Delivered in good condition, no resuscitation required
- Mother: Stable post-op, no wound dehiscence or infection
- Team: Effective MDT coordination ensured safety throughout

Clinical Timeline

- Gestation at Admission: 37+3 weeks
- Indication for Delivery: FGR and gestational diabetes
- Failed IOL: Dilapan®
- Category 3 CS: Decision for emergency delivery



Without panniculus retractor



Panniculus retractor



With panniculus retractor

DICUSSION

Anaesthetic Considerations

- Obesity complicates neuraxial block placement and increases block failure rate^[3,6]
- Anticipation and simulation of airway difficulty essential in preoperative planning
- Consideration of awake fiberoptic or videolaryngoscopy when indicated

Surgical Challenges

- Increased subcutaneous fat limits exposure and prolongs surgery²
- Scar tissue from prior CS raises the risk of bladder/bowel injury
- Panniculus retractor improves access and reduces operative fatigue

Multidisciplinary Approach

- MDT planning ensured preparedness for difficult spinal, airway compromise, and neonatal resuscitation
- Close communication between obstetricians, anaesthetists, and theatre staff critical

RECOMMENDATIONS

- Preconception: Promote weight management pre-pregnancy to reduce risks⁷
- Antenatal Care: Closely monitor for GDM, FGR, and consider elective CS in high-risk scenarios
- Standard Equipment: Panniculus retractors should be available in high-BMI surgical cases
- Simulation: MDT simulations improve response to obstetric emergencies in complex patients
- Elective Planning: In similar profiles, elective CS may reduce emergency-related risk

CONCLUSION

Morbid obesity and previous CS markedly increase obstetric complexity. With forward planning, appropriate surgical tools, and MDT collaboration, even high-risk emergency CS can result in safe maternal and neonatal outcomes. This case underscores the need for innovation, vigilance, and team cohesion in managing challenging obstetric cases.

REFERENCES

- Poobalan AS et al. "Obesity in pregnancy: a review." BMJ. 2009; 339:b2965.
- Heslehurst N et al. "The impact of maternal BMI on delivery and pregnancy outcomes." BJOG. 2008;115(8):938-947.
- Hood DD, Dewan DM. "Anaesthesia for obstetrics in obese parturients." Anesthesiol Clin North America. 2002;20(4):785-806.
- Blomberg M. "Maternal obesity and risk of postpartum haemorrhage." BJOG. 2011;118(4):564-571.
- Gizzo S et al. "Panniculus retractors for CS in obese patients: surgical advantages and outcomes." J Matern Fetal Neonatal Med. 2015;28(1):88-92.
- Lee A et al. "Neuraxial anaesthesia in the obese parturient." Anaesthesia. 2016;71(Suppl 1):62-70.
- CMACE/RCOG Joint Guidelines. "Management of Women with Obesity in Pregnancy." London: RCOG Press, 2010.