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LETTER TO THE EDITOR

Letter to the Editor: Enhanced recovery after caesarean section - a call to action

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Dear Editor,

Caesarean section (CS) is the most common surgical procedure globally and represents a third of surgeries performed in resource-limited settings.[1,2] In South Africa (SA), the reported CS rate in the public sector was 24.1% in 2015 and continues to rise.[3] A SA study found that pain assessment post-CS was poor, with less than a third of patients receiving analgesics as prescribed.[4] Another SA study found that post-CS patients experienced the highest incidence of moderate to severe pain of all procedures (> 80%).[5] Pain management post-CS remains particularly challenging in resource-limited settings, especially in the context of enhanced recovery programmes.[1,2]

Multiple societies have constructed consensus guidelines for pain management post-CS.[6,7] The PROSPECT (Procedure-Specific Postoperative Pain Management) guidelines address anaesthesia (pre-, intra-, and postoperative actions) and surgical techniques in the prevention and management of pain after CS under neuraxial anaesthesia.[6] The American Society of Obstetrics and Gynecologists Practice Bulletin similarly recommends a multimodal approach to pain management post-CS, incorporating neuraxial opioids, regional techniques, and oral analgesics to limit systemic opioid administration.[7] The South African Society of Anaesthesiologists' (SASA) acute pain guidelines provide systemic analgesic options for intra- and postoperative analgesia; however, a fixed protocol is not specified.[8] The lack of tailored protocols applicable to resource-limited settings has been cited as a contributing factor for inadequate pain management post-CS in a SA study.[4]

Enhanced recovery after surgery (ERAS) pathways, originally developed for colorectal surgery, have been adapted for obstetrics and were first encouraged by the National Institute for Health and Care Excellence (NICE) in the United Kingdom.[9,10] Comprehensive enhanced recovery after caesarean section (ERAC) guidelines were established in 2018 by the Society for Obstetric Anesthesia and Perinatology and focused on anaesthetic-related elements.[10] A total of 25 recommendations (five preoperative, nine intraoperative, and eleven postoperative) were made, and the level of evidence for each was graded.[10] Guidance for the intraoperative management of CS under neuraxial anaesthesia and postoperative analgesia was detailed.[10]

A systematic review of interventions and outcomes in ERAC that included 47 studies found benefit in reduced length of stay and costs, while inconsistent benefit was found in reduced opioid consumption and successful breastfeeding.[11] Satisfaction scores were inconsistently reported. Overall, most studies demonstrated benefit and none reported harm, but the quality of evidence was low.[11] The heterogeneity of outcomes reported in ERAC studies is a major barrier to the formulation of high-quality evidence. An expert consensus guidance was later developed, aimed at establishing core outcomes for ERAC.[12]

Patient-reported outcomes (PRO) have gained traction as a more meaningful endpoint than traditional clinical measures.[14] PRO provide a multidimensional assessment of recovery, recognising outcomes that are important to patients. The Obstetric Quality-of-Recovery-10 (ObsQoR-10) score is one such measure that quantifies postpartum recovery as a dimensionless number between 0 and 100, with higher scores indicating better recovery.[12] Its measurement is recommended as a core outcome assessment of ERAC.[12]

We developed an ERAC programme tailored for implementation at a public health institution in SA, with inputs from anaesthesiologists, obstetricians, nurses, dieticians, and hospital administration. Key, low-cost, feasible interventions were implemented, focusing on 14 core processes derived from international ERAC guidelines (Figure 1).[10,12] Spinal anaesthesia included 11 mg (2.2 ml) of hyperbaric bupivacaine together with an ultra-low dose of preservative-free intrathecal morphine in keeping with SASA guidance.[8] Morphine dilution was included as a guide in the infographic to prevent dosing errors (Figure 1). We opted for a higher dose of bupivacaine to ensure adequate spinal blockade, as no fentanyl was used in the spinal anaesthetic.

We conducted a prospective before–after study to evaluate the implementation of the ERAC programme.[13] The primary outcome measure was postpartum recovery, measured by the ObsQoR-10 score. In our study, the post-ERAC cohort demonstrated a significant improvement in ObsQoR-10 scores. Additionally, we found a significant reduction in opioid consumption and improvements in other recovery metrics, such as fasting duration, time to catheter removal, mobilisation, and first oral intake.

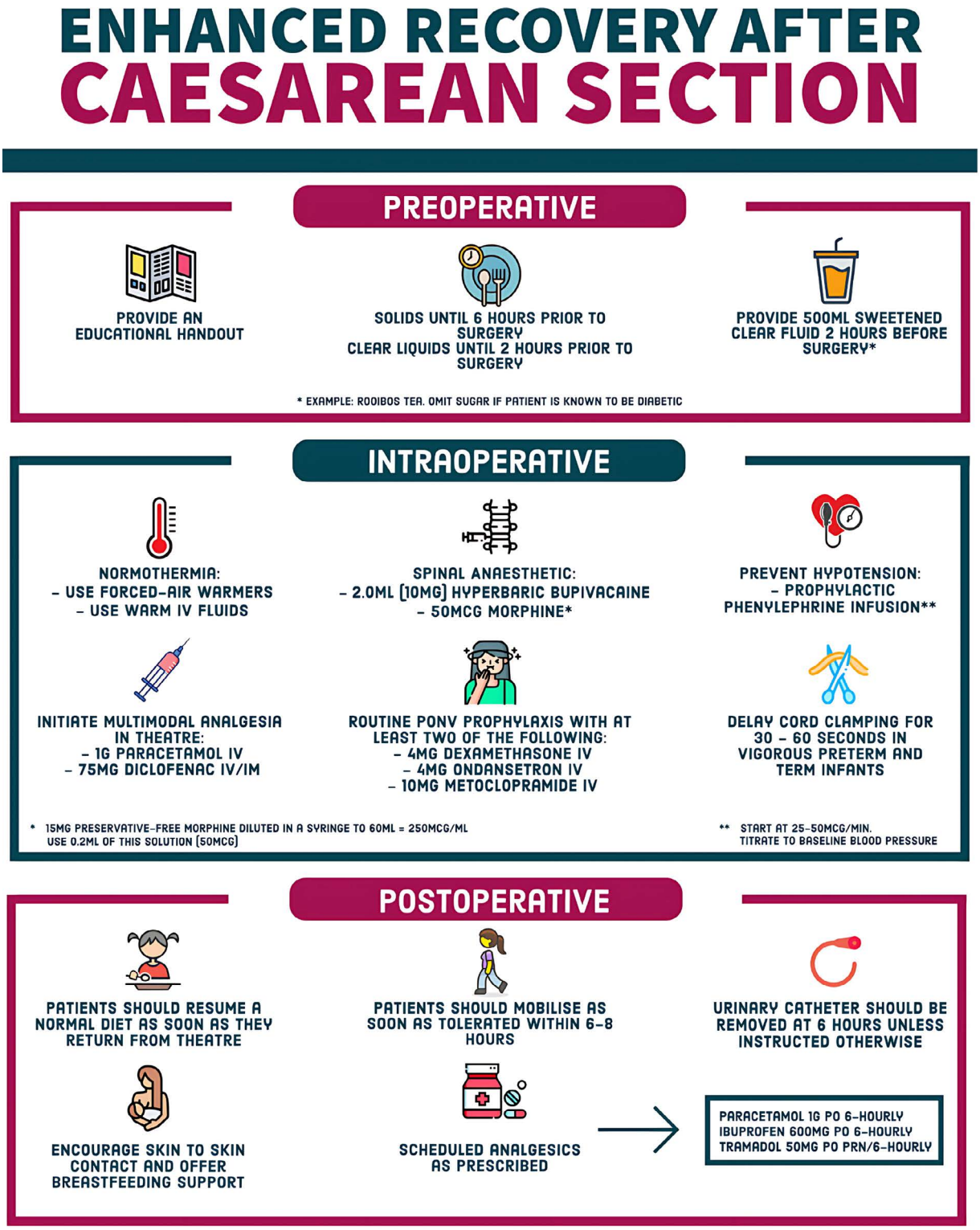

Figure 1: Tailored ERAC programme

An Irish study previously evaluated an ERAC programme using an earlier version of the scoring tool, the Obstetric Quality-of-Recovery-11.[15] To facilitate completion of the questionnaire, a 10-item version was developed and validated.[16] Ours is the first study globally using the ObsQoR-10 to demonstrate benefit in PRO from an ERAC programme.[13] Only three other studies have investigated tailored ERAC programmes in Africa, but these have focused on traditional outcomes.[17-19] Favourable outcomes were found regarding length of stay and pain, with only one study reporting better patient satisfaction.[17-19]

Implementing ERAC in a resource-limited setting faces challenges, such as the prioritisation of emergency CS, high obstetric burden, and overburdened staff. This impacts factors essential to recovery, such as postoperative analgesia administration and processes to enhance the postoperative course, like oral intake, mobilisation, and catheter removal.[4]

To overcome these obstacles, we encourage anaesthesiologists in SA to become advocates for change in the practice of perioperative care for CS and to champion the adoption of tailored ERAC programmes. The interventions in an ERAC

programme are inexpensive to implement; however, a strong driving force is needed to overcome the inertia of traditional practices. Implementing context-specific ERAC pathways is feasible, and the sum of marginal gains of simple processes can cumulatively result in improved maternal experience and postpartum recovery.

Conflict of interest

The authors declare no conflict of interest.

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