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Editorial

Enhanced Recovery after Caesarean - Heading towards a New Era!!

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Received: June 30, 2020; **Published:** August 29, 2020

Enhanced recovery protocols aim to modify the inflammatory and metabolic changes associated with surgery so as to improve patient outcomes. A specific care pathway has been designed, based on multimodal evidence-based interventions which achieve two major goals. First is, to maintain normal physiology during the perioperative period, in order to shorten the recovery period, reduce perioperative complications and shorten the length of stay in hospitals and secondly to reduce the surgical stress response and mitigate its consequences [1].

ERAS protocols were first implemented in colorectal surgery by Henry Kehlet in 1997 [2] and after observing its positive impact in the perioperative period, these protocols were further extended to other surgical specialties like orthopedics, urology, oncology, gynecology etc.

There has been a slower acceptance of ERAS protocols in Obstetrics, though Cesarean sections are the second most commonly performed surgery after cataract, the world over [3]. However, with the rising trend in cesarean deliveries, and increased pressure on maternity services, institutes in Europe and USA have started implementing ERAS protocols for CD (Enhanced recovery after caesarean-ERAC). The Society for Obstetric Anaesthesia and Perinatology (SOAP) [4] and the American College of Obstetricians and Gynecologists and ERAS society have recently published comprehensive guidelines on ERAS protocols for CD [5-7].

The young and healthy parturients have the potential for rapid recovery following CD and the added responsibility of caring for their newborn motivates them to resume their normal activities in the postpartum period.

The care pathway for ERAC in Obstetrics, involves a continuum of care from preconception outreach, ante partum optimization, intrapartum care including the anesthetics, concluding with postpartum inpatient care and outpatient support [4].

Key elements of ERAC include a preoperative sensitization of parturients towards benefits of various components, details of procedure and early initiation of breast feeding. Preoperative protocols include minimal fasting with clear high caloric carbohydrate drinks up to 2 hrs before surgery which reduces preoperative thirst, hunger, anxiety and also reduces insulin resistance [8]. Preoperative Hb optimization [9] antibiotic administration and thromboprophylaxis [10] are other components of this protocol in the preoperative period.

During the intraoperative period, special emphasis includes optimal fluid therapy, prevention and treatment of spinal induced hypotension, optimal uterotonics, temperature control and nausea, vomiting prophylaxis [6]. Following delivery of the neonate, delayed cord clamping, early skin to skin contact of baby and mother, early resumption of oral intake, early ambulation, promotion of gut motility, early removal of urinary catheters and optimal glycemic control are important steps in the protocol [7]. Avoidance of opioids and good perioperative multimodal analgesia is considered an important cornerstone for optimal recovery.

Successful implementation of the ERAC pathway requires collaboration with a multidisciplinary team which apart from obstetricians, anaesthesiologists and neonatologists, should also include lactation consultants and Counselors. To make this program effective and sustainable, it should be included as an important part of a standard model in healthcare delivery system of every institute dealing with obstetric care.

The potential barriers for successful implementation of ERAS in CD, involves resistance from the health care providers, who are comfortable with an age old standard practice, lack of trained staff, infrastructure and follow up after discharge, and additional resources required to educate and counsel the patients [11,12]. Regular audits to identify compliance and opportunities for improvement, should be an important part of any new protocol that is introduced for optimizing patient care. Thus. future ERAC research should focus on elements in the crucial pathway of ERAC protocol, which affect the well-being of mother and neonate.

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Volume 6 Issue 9 September 2020