

## ERAS for cesarean delivery: Intraoperative care

Enhanced recovery after surgery (ERAS) has been shown to improve patient outcomes and save resources. Using ERAS Society principles, the following elements have been recommended under author consensus for “process-directed maternal care” for intraoperative cesarean delivery (CD). (Watch for recommended postoperative elements in a future issue.)

### Intraoperative pathway



*Administer IV antibiotics* within 60 minutes before the CD incision

*For abdominal skin cleansing, use* chlorhexidine-alcohol versus aqueous povidone-iodine solution

*Consider preparing the vagina* with povidone-iodine solution to reduce post-CD infection

*Use regional anesthesia* as the preferred method of anesthesia for CD

*Avoid hypothermia* with appropriate patient monitoring and warming devices during CD (recommended for hypothermia prevention: forced air warming, IV fluid warming, increased OR temperature)

*Maintain perioperative and intraoperative euvolemia* to improve maternal and neonatal outcomes

### Surgical technique considerations



*Use blunt expansion* of a transverse uterine hysterotomy to reduce surgical blood loss

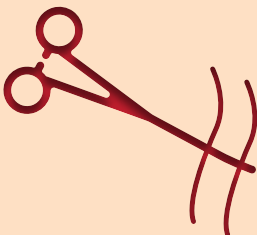
*Close the hysterotomy in 2 layers* to lower the rate of uterine rupture

*Do not close the peritoneum* to decrease operative time with no effect on outcomes

*Reapproximate the tissue layer* in women with  $\geq 2$  cm of subcutaneous tissue

*Use subcuticular suture* for skin closure in most cases

### Neonate pathway



*Term delivery: Delay cord clamping* for  $\geq 1$  min

*Preterm delivery: Delay cord clamping* for  $\geq 30$  sec

*Maintain body temperature* between 36.5° and 37.5° Celsius

*Avoid routine airway suction* or gastric aspiration (use only for obstructive airway symptoms)

*Provide neonatal supplementation with room air* versus inspired air with oxygen

*Have capacity for immediate neonatal resuscitation* in all settings that perform CD

\*First-generation cephalosporin is recommended in all women; in women in labor or with ruptured membranes, adding azithromycin further reduces postoperative infections.

Source: Caughey AB, Wood SL, Macones GA, et al. Guidelines for intraoperative care in cesarean delivery: Enhanced Recovery After Surgery Society recommendations (part 2). *Am J Obstet Gynecol.* 2018;219:533-544.