

EMERGENCY CAESAREAN SECTION

Act fast – think team – communicate clearly
Maternal safety first – fetal safety thereafter

INDICATIONS

- Fetal asphyxia (CTG pathological)
- Placental abruption with fetal compromise
- Uterine rupture suspected
- Cord prolapse
- Failed instrumental delivery
- Severe maternal deterioration

GOAL

Delivery within 30 min from decision (Category 1).

Aim for delivery within 75 min (Category 2).

BEFORE INCISION – CHECKLIST

- Indication confirmed
- Informed consent (when possible)
- Allergies?
- Nil per os
- 2 large-bore IV lines
- Blood samples: Hb, T&S, coagulation
- Crossmatch if time allows
- Bladder catheterization
- Fetal heart rate documented
- Team briefing (roles & plan)

PREMEDICATION

- Oxygen 4–6 L/min via face mask
- Left uterine displacement
- H₂-antagonist: e.g. ranitidine 50 mg IV
- Metoclopramide 10 mg IV
- Sodium citrate 30 mL orally
- Bicitra® 30 mL orally (or if not possible: 0.3 M sodium citrate 30 mL via NG tube)

ANESTHETIC TECHNIQUE – GENERAL ANESTHESIA

RAPID SEQUENCE INDUCTION (RSI)

Preoxygenation	100% O ₂ for 3–5 min
Induction	Propofol 1.5–2.5 mg/kg IV
Opioid	Fentanyl 1–2 µg/kg IV
Neuromuscular blocker	Succinylcholine 1–1.5 mg/kg IV or Rocuronium 1.2 mg/kg IV
Cricoid pressure	Apply until baby delivered
Intubation	Rapid, with in-line stabilization
Maintenance	Sevoflurane 1 MAC in 50% O ₂ /air Additional fentanyl as needed
After delivery	Oxytocin 5 IU IV slow + infusion 5–40 IU in 1000 mL

IF DIFFICULT AIRWAY EXPECTED

- Awake intubation (consider regional anesthesia)
- Video laryngoscopy / bougie
- Call for senior help early

ANESTHETIC TECHNIQUE – REGIONAL ANESTHESIA

- Preferred if no contraindication and time allows
- Spinal anesthesia (preferred):
 - Bupivacaine 5 mg (hyperbaric) + fentanyl 10–20 µg or Bupivacaine 7.5–10 mg (hyperbaric)
- Ensure adequate block (T4) before incision
- Vasopressor ready (phenylephrine / ephedrine)
- Convert to GA if block insufficient or surgery delayed

VASOPRESSOR DOSING

Phenylephrine 100 µg IV	Ephedrine 5–10 mg IV
Repeat 50–100 µg as needed	Repeat as needed

UTEROTONICS AFTER DELIVERY

Oxytocin	5 IU IV bolus slow then 5–40 IU in 1000 mL
Ergometrine	0.2 mg IV/IM (avoid in hypertension / preeclampsia)
Carboprost	250 µg IM (avoid in asthma)
Misoprostol	0.8–1.0 mg PR if needed

POSTOPERATIVE CARE

- Continue oxytocin infusion
- Pain management: e.g. paracetamol 1 g IV × 4, NSAID (if not contraindicated), morphine titrated
- Monitor: BP, pulse, respiration, SpO₂, diuresis, bleeding, uterine tone
- Thromboprophylaxis (according to risk)
- Temperature control
- Early skin-to-skin contact and breastfeeding if mother and infant stable

EMERGENCY ALGORITHM – SUMMARY

1. Decision for emergency caesarean section
2. Call team – start checklist
3. Premedication & preparation
4. Choose anesthetic technique
 - GA with RSI if immediate delivery required
 - Regional anesthesia if time allows and no contraindications
5. Delivery
6. Uterotonics & hemorrhage prevention
7. Postoperative care & monitoring

FLUIDS & BLOOD

- Crystalloids: e.g. Ringer's acetate or balanced solution
- Colloid if indicated
- Transfuse according to blood loss and labs
- Activate MTP if needed

POSSIBLE COMPLICATIONS

- Aspiration
- Difficult airway
- Hypotension
- Hemorrhage
- Uterine atony
- Anaphylaxis
- Awareness
- High spinal (regional)

CONTACTS / NOTES

TEAM ROLES (EXAMPLE)

Anaesthetist: anesthesia & airway **OB physician:** surgery **Nurse:** drugs & fluids **Midwife:** baby **Assistant:** equipment & documentation

RELATIVE CONTRAINDICATIONS TO REGIONAL ANESTHESIA

Coagulopathy • Sepsis • Hypovolemia • Raised ICP • Patient refusal
Local infection • Neurological disease

DOSES – COMMON DRUGS (ADULT)

Fentanyl 1–2 µg/kg IV	Succinylcholine 1–1.5 mg/kg IV	Phenylephrine 50–100 µg IV
Propofol 1.5–2.5 mg/kg IV	Rocuronium 1.2 mg/kg IV	Ephedrine 5–10 mg IV