National ESMOE guidelines for district and regional hospitals

PROTOCOL FOR CAESAREAN SECTION UNDER GENERAL ANAESTHESIA

PREPARATION

Full history and examination
- NB airway and assess difficulty of intubation
- NB signs of hypovolaemia - decide whether the patient requires resuscitation first

Prepare the patient
- Premedication – sodium citrate 30ml orally, 0 - 30 minutes pre-operatively
- Good IV access, with 500ml clear fluid given as preload
- Urinary catheter

Prepare the theatre
- Full machine check, check ventilator settings
- Check essential equipment and monitoring (ECG, NIBP, SpO_2, capnograph)
- Draw up essential drugs

TECHNIQUE

Position the patient
- Wedge under right hip
- Head and shoulders on a pillow, sniffing

Administration of general anaesthesia
- Measure NIBP now, and every 3 minutes
- Establish ECG and pulse oximetry
- Pre-oxygenate 100% $FiO_2$for 3 minutes
- Start the suction, place Yankauer nearby
- Perform rapid-sequence induction with cricoid pressure, then perform laryngoscopy and intubation
- Confirm correct placement of ETT by capnography, auscultation and clinical impression of chest moving equally
- Ventilate, using at least 40% oxygen and not more than 1 MAC volatile
- Use small doses of short-acting muscle relaxant if necessary

Failed intubation
- Call for help, and try to wake patient up
- Institute mask ventilation while maintaining cricoid pressure

If successful mask ventilation:

(i) Check head position, change to a different laryngoscope blade, assistant to externally manipulate the cricoid, and re-attempt intubation.

(ii) If still unsuccessful, decide whether to continue with mask ventilation OR with spontaneous ventilation OR attempt insertion of LMA OR awaken the patient

If unsuccessful mask ventilation:

(i) One further intubation attempt OR attempted insertion of LMA

(ii) If still unsuccessful and unable to ventilate, and spontaneous ventilation has not resumed, perform an emergency cricothyroidotomy (or tracheostomy), and ventilate the patient.

iii) Decide whether to continue with the procedure or wake the patient up

After delivery
- Ask obstetrician if they are certain there is no second baby
- Give 2.5 IU oxytocin IVI slowly, over 1 minute
- Can increase volatile, and give multimodal analgesia – morphine 10mg, consider fentanyl 100ug, non-steroidal anti-inflammatory, paracetamol, and infiltrating the wound with local anaesthetic.

Once the surgery is completed
- Switch off the volatile, and give reversal if a non-depolarising muscle relaxant was given use nerve stimulator or see signs of spontaneous recovery first.
- Extubate in theatre, awake and reversed

RECOVERY

Monitoring
- Administer oxygen via 40% venturi mask
- Monitor NIBP and SpO_2
- Make sure that the patient is not bleeding
- Make sure that the patient is well analgesed
- Infuse 20 IU oxytocin in one litre of clear fluid over 8 hours (125mls/hr)

Discharge to the ward

Compiled by the ESMOE Anaesthesia Working Group
July 2009 Updated March 2011