

## Epidural Pathway

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### Key Amendments

| Date | Amendments | Approved by |
|------|------------|-------------|
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## Introduction

### 1. Indications

- Maternal request
- Prolonged and painful labour
- Uncoordinated uterine contractions with oxytocin infusion
- Anticipated instrumental delivery
- Multiple pregnancy
- Trial of vaginal birth after caesarean section (VBAC)
- Premature labour
- Vaginal breech delivery
- Pre-eclampsia
- Diabetes
- Cardiac and respiratory disease
- Uncontrollable urge to push on non-fully dilated cervix
- Obese patient or other risk factors for GA

### 2. Cautions

- Central nervous system disorders
- Spinal deformity
- Potential severe haemorrhage
- Systemic sepsis if antibiotics given.
- Fetal distress until FBS performed or obstetric confirmation given
- Cardiac Pathology (e.g. aortic stenosis)

### 3. Absolute contraindications

- Patient refusal
- Lack of appropriate equipment or staff
- Coagulation disorder
- Local sepsis at epidural site
- Uncorrected hypovolaemia
- Severe spinal abnormality
- Some neurological diseases

### Contacting the Duty Anaesthetist

The midwife looking after the woman, who wishes an epidural for pain relief during an uncomplicated labour, should contact the duty anaesthetist. The referring midwife should have all the relevant information.

1. A vaginal examination should be performed in accordance with the midwifery protocol within four hours of epidural request.
2. A 14G or 16G IV cannula must have been sited prior to siting an epidural catheter and all the relevant blood results must be available. **In-patients with pre-eclampsia (diastolic BP 90 mmHg) a platelet count within the last 6 hours is the minimum required. A clotting study is only required if the platelets are <80 x 10<sup>9</sup>/litre.**
3. The epidural information card should be given to the woman prior to the anaesthetist attending. This is available in different languages via the [www.oaa-anaes.ac.uk](http://www.oaa-anaes.ac.uk) website.

If the duty anaesthetist cannot attend within **45** minutes then they should discuss with another anaesthetist on-call.

### Anaesthetist's Role

The anaesthetist should consider asking for advice or help prior to siting the epidural in the following patients:

- The obese patient.
- The patient with previous back problems.
- The patient with previous epidural/spinal problems.
- The patient with cardiac/respiratory pathology
- The anaesthetist should discuss the advantages of having an epidural and discuss and document the potential side effects as listed on the anaesthetic chart.

When performing epidural, consider asking for advice or help if:

- A dural tap is performed. (A consultant anaesthetist should be informed within 24 hours.)
- If you cannot successfully site the epidural within 20 minutes.
- If the patient is becoming distressed.
- If you think there may be blood or CSF in the catheter.
- If there is a cardiac/respiratory history

After completion of epidural and top-up consider asking advice if:

- Pain relief is inadequate after withdrawing catheter and/or further top-up.
- Complications develop e.g. profound hypotension

The anaesthetist will site the epidural using a combined spinal epidural (CSE) technique or just an epidural. The patient should have a large-bore cannula (16-14g) sited and have baseline observations taken. Advice on fluid balance should be sought from the obstetricians if the patient is suffering from pre-eclampsia and receiving fluid restriction.

### **Cse**

The anaesthetist can use either a needle through needle or separate needle insertion technique. The spinal dose to use is 2.5–5mls of premixed bupivacaine 0.1% and fentanyl 2 micrograms per ml (WRH)

solution taken under sterile conditions from the solution bag.

The PCEA should be given to the patient **30 mins** (or less if still uncomfortable) after the spinal.

### **Epidural**

After placing the epidural and checking no blood or CSF in the catheter on aspiration, the bolus dose to use is 15mls of premixed bupivacaine 0.1% and fentanyl 2 micrograms per ml (WRH)

solution given as a bolus via the epidural pump.

The PCEA should be given to the patient after the height of the block has been checked at 10 mins and is below T10.

Monitoring of the patient after establishment of an epidural;

- Establishment/after each bolus: request blood pressure and pulse to be measured every 5 min for 15 min
- Provide continuous fetal monitoring for 30 min
- After 30 min: call anaesthetist if the woman is still in pain
- Every hour: check level of motor and sensory block