



Guidelines for the Conduct of Epidural Analgesia for Parturients

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*2.1 of this document has been changed from “Guidelines for minimum facilities for safe anaesthetic practice in delivery suites [T4]. Considerations should be given to the availability of lipid emulsion therapy for management of LA toxicity in addition to the drugs listed in section 4 of [T4].” to “Guidelines for minimum facilities for safe anaesthetic practice in delivery suites [T4].” after the updating of T4 in Dec 2016.



1. GENERAL PRINCIPLES

1.1 Epidural analgesia should be performed by anaesthesiologists skilled and fully trained in the technique or by trainees under appropriate supervision. All persons who undertake epidural analgesia must understand the relevant anatomy, physiology, pharmacology as well as potential complications and contraindications to its use. They must be able to recognize and promptly treat any complications.

1.2 The responsible anaesthesiologist must be in attendance throughout the institution of the epidural analgesia until a satisfactory blockade has been established, the parturient is stable and the potential for immediate complications has passed.

1.3 Epidural analgesia remains the responsibility of the anaesthesiologist initiating the technique. The anaesthesiologist may delegate the subsequent management to another medical practitioner or nurse competent in managing epidural analgesia. This competence include, but is not limited to, an understanding of the technique, the drugs and equipment used, monitoring requirements and the recognition and management of any side effects and complications.

1.4 Epidural analgesia has the potential to change many of the normal physiological processes of labour and delivery. From the time that epidural analgesia is instituted, it is essential that the parturient is under the care of a medical practitioner with obstetric training who can assess the mother as necessary, and rapidly effect delivery of the baby by whatever technique as deemed appropriate.

1.5 Experienced nurses or midwives who are trained and competent to manage epidural techniques must be available at all times to manage the parturients given an epidural.

1.6 Epidural catheter and tubing should be clearly labelled to avoid any possible risk of misconnection and inadvertent drug administration.

2. FACILITIES REQUIRED IN THE LABOUR ROOM OR DELIVERY SUITE

For the safe administration of epidural analgesia, reference should be made to the



documents issued by the Hong Kong College of Anaesthesiologists:

- 2.1 Guidelines for minimum facilities for safe anaesthetic practice in delivery suites [T4].
- 2.2 Guidelines on monitoring in anaesthesia [P1].
- 2.3 Guidelines for postanaesthetic recovery care [P3]

3. CONDUCT OF EPIDURAL ANALGESIA FOR PARTURIENTS

- 3.1 The parturient must have a proper assessment by an anaesthesiologist prior to the initiation of epidural analgesia.
- 3.2 Informed consent must be obtained.
- 3.3 Facilities for resuscitation should be confirmed as readily accessible prior to the performance of epidural analgesia.
- 3.4 Contraindications to epidural technique should be assiduously excluded or corrected prior to performing the epidural procedure if an epidural technique is required. Particular attention must be given to coagulopathy, bleeding diathesis, blood dyscrasia, thrombocytopaenia and anticoagulant uses. Precaution should be given to conditions such as hypovolaemia, occult haemorrhage and supine hypotension syndrome.
- 3.5 A well secured wide-bore intravenous cannula and appropriate infusion of intravenous fluid should be in place.
- 3.6 The anaesthesiologist instituting epidural analgesia should have an assistant with the appropriate training.
- 3.7 Epidural analgesia should be performed using appropriate infection control measures. Standard precaution and aseptic techniques should be observed during the procedure. Skin preparation should be conducted in such manner that skin disinfectants are unable to contaminate drugs or equipment used for neural blockade.
- 3.8 The parturient on epidural analgesia should be monitored and continued to be monitored until all effects of the epidural analgesia have subsided.
 - 3.8.1 vital signs (blood pressure, pulse rate and oxygen saturation)
 - 3.8.2 progress of labour and fetal conditions



3.8.3 effect of analgesia (pain score, sensory and motor block, side effects)

4. THE EPIDURAL RECORD CHART

The epidural record chart is an important document that records the progress of the epidural and warns of changes in the patient's vital parameters in relationship to the dosages of medication given to the parturient.

The record should include:

4.1 Basic Information:

- 4.1.1 Patient's name, hospital number, sex, age and body weight
- 4.1.2 Date of procedure

4.2 Pre-anaesthetic history

- 4.2.1 Indications for epidural
- 4.2.2 Parity, obstetric and relevant medical history.
- 4.2.3 Clinical assessment, cervical dilatation at commencement of epidural.
- 4.2.4 Relevant investigations
- 4.2.5 Known allergy to drugs, materials or foodstuffs.
- 4.2.6 Recent and current medications taken by the patient
- 4.2.7 Past anaesthetic history

4.3 Epidural Record

- 4.3.1 Name of anaesthesiologist(s) performing the epidural
- 4.3.2 Details of the anesthetic techniques including positioning, needle size, level of epidural catheter insertion, loss of resistance method, depth of epidural space, catheter length in epidural space
- 4.3.3 Details on epidural infusion including the concentration, volume and the rate of epidural infusion, and patient-controlled epidural analgesic regime if applicable
- 4.3.4 Details of epidural and other drugs used including time, dosage, route and any untoward reactions. One needs to pay particular attention to



drugs used intraspinally as permanent neurological deficit and death can result.

4.3.5 Details of intravascular cannula and any intravascular fluids administered

4.3.6 Details of monitors used.

4.3.7 Record of patient's vital parameters and foetal heart rate

4.3.8 Record of sensory and motor block achieved.

4.3.9 Details of any complications and their management.

4.4 Time and method of delivery and condition of the baby.

4.5 Time of removal of catheter and state of catheter upon removal.

4.6 Instructions to nursing staff on the management of the epidural technique and name of anaesthesiologist to contact with contact number.

5. THE POST EPIDURAL FOLLOW UP

After the completion of the epidural analgesia process, the anaesthesiologist should still be contactable to assess and manage any complications secondary to the epidural when required. A post-epidural review of the patient should be conducted after the removal of the epidural catheter. The information gathered should:

5.1 Gauge the success or otherwise of the epidural technique.

5.2 Note any complications arising from the epidural process.

5.3 Describe the management of any complications and the outcome.

5.4 Ascertain the patient feedback to the epidural technique.

5.5 Be used in the quality assurance programme of the Department.

6. REFERENCES

ANZCA PS3 (2011) Guidelines for the Management of Major Regional Analgesia