Epidural Analgesia – Standard procedure for Midwives (GL765)

Approval

<table>
<thead>
<tr>
<th>Approval Group</th>
<th>Job Title, Chair of Committee</th>
<th>Date</th>
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<tbody>
<tr>
<td>Maternity &amp; Children’s Services Clinical Governance Committee</td>
<td>Chair, Maternity Clinical Governance Committee</td>
<td>1st November 2019</td>
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<tr>
<td>Anaesthetic Obstetric Clinical Governance Committee</td>
<td>Chair, Anaesthetic Obstetric Clinical Governance Committee</td>
<td>18th October 2019</td>
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</tbody>
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Change History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author, job title</th>
<th>Reason</th>
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<tbody>
<tr>
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<td>Oct 2019</td>
<td>Dr L Williams (Consultant Anaesthetist)</td>
<td>Amended to include reference to PIEB pump delivery of epidural analgesia</td>
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<td>4.1</td>
<td>May 2020</td>
<td>S Bailey, Matron for Hospital Services</td>
<td>Link to Trust policy CG399 (pg 1 &amp; 7). Disposal of unused epidural excerpt added (pg 7)</td>
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To be read in conjunction with:

- RBFT Controlled Drug policy CG399
Overview: The aim of an epidural for labour is to provide adequate analgesia without significant side effects. However, performing an epidural will turn any low risk labour into a potentially high risk one. Any epidural can cause life threatening side effects.

- After a woman requests an epidural for labour a decision should be made as to whether this is appropriate.
- The woman should be given the opportunity to read the epidural information sheet which is present in each delivery room.
- The midwife in charge of labour ward should be informed in order to be certain that there is sufficient staff to care for a woman with an epidural.
- An epidural should not be commenced unless there will be one-to-one care midwifery available.

Midwifery tasks pre-procedure

- A 20 minute CTG should be performed prior to the insertion of an epidural
- Site venflon (at least 16 gauge) and prepare an intravenous infusion of Plasma-Lyte 148 as per prescription. This should be able to run freely but can be set at a lower rate.
- Intravenous fluids do not need to be running just because of the presence of an epidural but do need to be available in case needed (hypotension or fetal distress). It is very easy to give large volumes of fluid inappropriately during labour.
- Record vital signs – BP, HR and FHR
- Check recent blood results (within last 6 hours) are available in women with significant PET, i.e. platelets and clotting.
- Obtain epidural pump from the equipment room, and the low dose mixture (LDM) from the controlled drug cupboard
- If the labour ward anaesthetist (bleep 142) is unable to attend the labour ward co-ordinator should liaise with the duty labour ward consultant anaesthetist (bleep 149) or the theatre anaesthetist (bleep 147). Ideally an anaesthetist should attend within 30 minutes of a request. Please inform the labour ward anaesthetist if any other anaesthetist has been contacted.
- During the procedure the midwife should assist the anaesthetist when necessary and ensure that monitoring of the fetal heart is continued throughout the procedure. If there are any difficulties in monitoring the fetal heart then the procedure should be halted until adequate monitoring is achieved.
Midwifery care of a woman with an epidural

1. **Immediate**
   - At no time should the woman be left unaccompanied. The midwife can leave the room if the responsible birth partner knows how to call for help.
   - **If at any time it becomes impossible to provide one-to-one midwifery care the consultant anaesthetist should be informed and the epidural pump should be stopped**
   - Continuous fetal monitoring with CTG – may be with abdominal transducer or FSE
   - After the initial test dose/first dose record pulse, blood pressure and fetal heart at 5 minute intervals for 20 minutes
   - Document findings on K2 and the epidural record sheet/EPR
   - Efficacy of the epidural in providing analgesia should be noted on the chart as should any actions taken
   - The anaesthetist will start the epidural pump
   - Inform anaesthetist of any problems.
   
   Observations should be recorded hourly (including NIBP, heart rate, SpO2 and respiratory rate. This should start at the next “hour” and continued every hour on the hour.

2. **Care in Labour**
   - Continuous fetal monitoring with CTG until delivery – documenting the total volume infused hourly (this can be found by pressing the info button on the pump
   - Record pulse, blood pressure, pain score, mobility score and block level on the epidural record/EPR
   - Monitor effectiveness of the epidural and inform the anaesthetist of any problems
   - If a previously working epidural becomes ineffective in a woman who has had any previous uterine surgery please ask for obstetric assessment. This includes hysteroscopy, myomectomy and caesarean sections – all carry a risk of scar rupture.
   - Bladder care – an epidural will prevent the ability to pass urine. As pelvic floor tone is progressively lost during labour with repeated ‘top-ups’ the bladder will become enlarged. This will delay the progress of labour. The bladder care guideline states that urinary catheterisation should be performed at the same time as the epidural is instituted. It can be performed at the time of the next vaginal examination provided this is within two hours.
   - At no time should the woman be allowed to lie fully supine. She should be sitting fully upright or in the full lateral position. If a vaginal examination is performed a wedge should be used to ensure uterine displacement but the woman should be in this position for the shortest possible time.
• **Pressure area care:** Women with functioning epidurals are at risk of developing pressure ulcers. This risk should be minimised by encouraging changes in the woman's position, moving the toco monitoring belts and by ensuring that she is not sitting on wet or creased sheets. Make sure that the Waterlow score is updated at the point of epidural insertion to reflect the neurological impairment when an epidural is sited. See Mobilisation notes below.

3. **Post Delivery - Epidural care**

• Remove the dressing
• Remove the epidural catheter and check that it is complete by looking for the blue tip.
• Apply dressing spray.
• Document on the epidural record/EPR that the catheter is removed and complete.

4. **Urinary Catheter Care –see Bladder care guideline (GL793)**

• Consider removing the catheter when the patient regains full sensation and is able to perform a ‘pelvic floor exercise’ or is mobile.
• Advise the patient on voiding urine – to report to midwife when she empties her bladder for the first time
• Advise the patient to note if she is passing large or small amounts of urine
• If passing small amounts examine her abdomen to palpate for a distended bladder due to retention. The small volumes represent overflow incontinence. Consider re-catheterisation
• Inform the medical team of any urinary problems

5. **Mobilisation**

• If a woman with a working epidural can perform a straight leg raise for 5 seconds with each leg in turn and if she also feels capable of weight bearing, she can be assisted to sit out or stand by the bed. If she is able to perform a deep knee bend she can mobilise around her room on the arm of an assistant (who may be the birth partner)
• The woman must return to a seated position or be on the bed for all epidural top ups.

6. **Observations**

• Record temperature, pulse, blood pressure, respiratory rate, pain score, mobility score and the upper level of the sensory block
• Document when the patient passes urine
7. **Transfer to the postnatal ward**

- Ensure that there is evidence of return of sensation / mobility to the lower limbs.
- Ensure that the ward staff are aware that the patient has had an epidural and whether or not she has voided urine since delivery.
- Inform staff if there is still a urinary catheter in place.

**Midwifery management of Dural puncture or intrathecal catheter:**

1. **Intrapartum**

   Epidural catheters should not be inserted into the intrathecal space – unless discussion had with a consultant anaesthetist.

   If a dural puncture has happened / suspected and the epidural re-sited, the local anaesthetic can still pass intrathecally.

   - **A high level of suspicion should be maintained and if the upper level of the sensory block is above the fundus or a dense motor block to legs (Bromage 4) develops then inform the anaesthetist immediately and stop the pump.**
   - The dural puncture must be noted on the unit white board and made known to the midwife in charge.
   - Monitor pulse, blood pressure, respiratory rate, saturations and fetal heart every five minutes for twenty minutes after the “hourly” observations on the hour.
   - Monitor the level of the epidural block using ethyl chloride spray. Report to the anaesthetist if the upper level is above T4/ nipple level.
   - Report any difficulties in breathing.
   - Document all findings carefully.
   - Report any complaint of a headache.
   - The second stage should be managed according to the usual unit policy. There is no evidence that elective lift out forceps reduces the incidence of headaches.

All other care should be as for any epidural but particularly:

- Continuous fetal monitoring
- Bladder care

2. **Post-partum**

   There is a **Dural puncture care pathway** to assist with nursing care of these women.

   - Monitor Temperature, pulse, blood pressure four hourly.
   - Initially encourage usual mobilisation as normal.
   - Report complaints of headache to the anaesthetic team.
• If she develops a postural headache encourage supine bed rest
• Ensure regular analgesia, caffeine and stool softeners
• Assistance with all activities of daily living including baby care and breast feeding
  Record in discharge letter that the patient has had a dural tap and a blood patch if relevant.
• Offered a follow up appointment in the anaesthetic clinic on Wednesday morning at six weeks postpartum or at a time that coincides with other hospital visits.

**Problems following epidurals and spinals**

Lack of return of sensation or mobility to the lower limbs 4 hours following a spinal or the last epidural top-up is a surgical emergency and prompts urgent involvement of an anaesthetist.

Bromage scoring (table below) can be used to aid the assessment of motor power to legs following an epidural or spinal. After 4 hours, any patient with a bromage score of 4 needs to be seen by an anaesthetist.

**The Bromage Scale (leg strength score)**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Criteria</th>
<th>Degree of block</th>
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<tbody>
<tr>
<td>1</td>
<td>Free movement of legs and feet</td>
<td>Nil (0%)</td>
</tr>
<tr>
<td>2</td>
<td>Just able to flex knees with free movement of feet</td>
<td>Partial (33%)</td>
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<tr>
<td>3</td>
<td>Unable to flex knees, but with free movement</td>
<td>Almost Complete (66%)</td>
</tr>
<tr>
<td>4</td>
<td>Unable to move legs and feet</td>
<td>Complete (100%)</td>
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Other symptoms to be aware of:

• Backache
• Numbness in legs or bottom
• Weakness in legs
• Unable to walk
• Unable to p/u
• Toilet paper feels odd

**Signs of spinal pathology**

• Tenderness over back
• Discharge from epidural site
• Pus from epidural site
• Extensive numbness in legs
• Extensive weakness in legs
• Abnormal gait
• Palpable bladder
• Reduced Perianal sensation
• Lax anal sphincter

Are symptoms getting better?
Are symptoms getting worse?

Contact the anaesthetist on labour ward (bleep 142), the consultant obstetric anaesthetist (bleep 149) or the consultant anaesthetist on call (bleep 322).

If none of the above but any of the following present offer an appointment in the Anaesthetic Antenatal Clinic in six weeks;

• Persistent numbness in feet
• Persistent weakness e.g. foot drop

If the latter, offer review by physiotherapist.

**Disposal of unused epidural**

Please follow the Trust's [Controlled Drug policy CG399](#) for disposal of any unused quantity of the epidural. Page 31

222. The entry in the drug register should record the amount given and where it relates to the amount wasted from any ampoule/dose unit.

223. As a matter of good practice, the emptying of the part dose into the Drug destruction kit (purple pot with absorbant inside) should be witnessed and both staff members should sign the Controlled Drugs register.

224. The destruction of unused quantities of reconstituted infusion devices e.g. PCA syringes, epidural bags/syringes and syringe drivers, must be emptied into a Drug destruction kit.

225. This must be witnessed and recorded on the patients' record.

**References:**

3. NICE guidance CG55. Intrapartum care: Care of healthy women and their babies during childbirth. 2007