THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST

ACUTE PAIN SERVICE
Anaesthetic Department, Level 1, Freeman Hospital

PROTOCOL FOR ROUTINE USE OF EPIDURAL ANALGESIA (EPCA) IN ADULTS

OPERATIONAL POLICY: Use and management of Epidural Patient Controlled Analgesia (EPCA) for post-operative pain relief in the following clinical areas only:

- All Theatre / Recovery areas
- Critical Care Unit / Cardio-thoracic ITU / PICU
- Wards: 2 / 3 / 5 / 6 / 6a / 7 / 8 / 12 / 19 / 20 / 25 / 25a / 27a or by prior arrangement of the Acute Pain Service

EFFECTIVE DATE: August 2008 **REVIEW DATE**: August 2011

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1. Planned use of epidural infusion by a trainee Anaesthetist should be discussed pre-operatively with a Consultant Anaesthetist.

2. Pre-operatively the patient should receive a verbal explanation of the technique together with an Epidural Patient Information leaflet (as produced by the Royal College of Anaesthetist).

3. The Anaesthetist should liaise pre-operatively with the Nurse-in-Charge of the Orthopaedic wards to ensure that adequately trained staff (day & night) will be available to care for the patient on return to the ward.

4. Epidurals should be sited in a clean environment e.g. Theatre Anaesthetic room, Recovery unit or Critical Care Units.

5. All patients must be catheterised whilst the epidural is insitu.

6. Patent I.V. access must be maintained and continued for 24 hours post-discontinuation of the epidural.

7. Epidural infusion must be entered on the APS Pain Control database and the prescription printed on a yellow Epidural Prescription Chart and delivered only via the Hospira Gemstar pump with the dedicated infusion set.

8. Epidural catheters must be dressed using an aseptic technique with the appropriate epidural dressing. The catheter should be clearly visible at the insertion site in order to aid examination.

9. If an inadvertent dural puncture occurs during insertion it is recommended that the catheter is threaded and the patient converted to an intrathecal, infusion/PCA and chart (please see intrathecal protocol).

10. Infusions should contain 0.1% Bupivacaine 500ml (pre-filled bag), to which may be added 5-40 mg of Diamorphine.

11. Prescriptions are to be set and / or altered only by an Anaesthetist or by a member of the Acute Pain Service (APS).

12. Programmes are to be set and / or altered only by an Anaesthetist, a member of the APS or an appropriately trained Recovery Nurse.

13. Patients with EPCA should not be discharged from the Recovery unit until they meet the discharge criteria. Any concerns should be raised with the Nurse in charge in the first instance. The patient may require review by the initiating Anaesthetist, APS or 1st on call Anaesthetist.

14. Hospira Gemstar pump keys must be kept on the Ward Controlled Drugs key ring.

15. An orange 'warning sticker' must be attached to the front of the drug kardex and in the 'PRN' section. However, if there are no opiates added to the infusion a grey "local anaesthetic infusion in progress" warning sticker should be used. The epidural should also be recorded in the *'Any other charts in use'* section of the Drug Kardex by the prescriber.

16. No other opioids or sedative drugs should be administered to patients receiving an epidural opiate infusion. Exceptions include patients on long term Benzodiazepines or receiving psycho-tropic medications. The APS should be consulted regarding these patients on an individual basis.

17. Long acting anti-coagulants (i.e. Warfarin and Clopidogrel) should be not be commenced whilst the epidural line is insitu.

18. Patients receiving epidural opiate infusion should have oxygen administered at 2 litres per minute by nasal cannula / 4 litres per minute via face mask.

19. All ward areas listed in the epidural operational policy should ensure adequate stocks of:-
    - Bupivacaine 0.1%, pre-filled bags
    - Diamorphine 10mg ampoules
    - Ephedrine 30mg ampoules
    - Naloxone 0.4mg / ml ampoules

20. If Naloxone is administered the APS or 1st on call Anaesthetist should be informed immediately.

21. Additional loading doses should only be administered by an Anaesthetist, a member of the APS or an appropriately trained Recovery Nurse.

22. All patients receiving epidural analgesia should be recorded on the epidural log in the equipment store in Central Operating Theatres and Cardio Recovery. This documentation is the responsibility of the Anaesthetist initiating the epidural or the person taking the Hospira Gemstar pump from the equipment store room.

23. The epidural prescription should be checked by two qualified Nurses and a record of this documented inside the prescription chart when patients are transferred from one clinical area to another or at staff change over.

24. If required to leave the ward area – e.g. for investigations / X-ray whilst the epidural is insitu a qualified Nurse must remain with the patient at all times

25. Patients with an Epidural will be assessed 1-2 times per day by the APS or the 1st on call Anaesthetist. Visits should be documented on the epidural prescription / observation form and should include daily inspection of the epidural exit site

26. Problems with epidural infusions should be referred to the APS or the 1st on call Anaesthetist as per instructions on the epidural prescription chart. The overall responsibility for the epidural lies with the Anaesthetist who initiated the technique. This Anaesthetist should be informed regarding any significant or persistent problems.

27. Observations must be documented as per instructions on the epidural prescription chart.

28. **PAIN SCORE**

- 2 consecutive pain scores of 5 (out of 10) on movement - inform Nurse in Charge
- 1 pain score of 7+ (out of 10) contact APS or the 1st on call Anaesthetist.

29. Dense motor block (score of 3 bilaterally) may be a neurological emergency. The APS or 1st on call Anaesthetist must be informed immediately. If persistent, the epidural should be stopped and the appropriate Consultant Anaesthetist concerned informed. If the block is not resolving 3 – 4 hours after stopping the epidural, the patient needs an urgent MRI scan to exclude a treatable lesion e.g. haematoma. Once the motor block has started to resolve, the epidural may be restarted. The patient may need alternative analgesia e.g. Morphine PCA while the epidural is stopped.

30. Removing epidural catheters – If the patient is on an anti-coagulant infusion or at risk of clotting abnormities, clotting levels must be checked and discussed with a Consultant Anaesthetist or the APS regarding timing of catheter removal. Epidural catheters can be removed **12 hours** post Tinzaparin administration. After the removal of the epidural catheter, administration of Tinzaparin must be delayed for **4 hours**. Epidural catheter tips should be sent for culture and sensitivity if there are any signs of infection at the exit site or the patient is pyrexial. Catheters should be removed using a clean no touch technique as per the trust infection control policy.

31. Nursing staff caring for patients with an epidural infusion should be familiar with the information and handouts on epidurals and have attended an epidural teaching session within the previous 3 years.

32. The APS should be contacted immediately if any of the following occur:
    - Development of a motor block
    - The epidural catheter is exposed
    - The filter becomes disconnected
    - There is excessive leakage at the epidural exit site
    - The catheter mark at skin is altered from the documented mark on the epidural prescription chart

    There is redness / swelling / pain around the exit site.

Person responsible for review: Acute Pain Service, Freeman Hospital.