

Expanded Practice Protocol for the Administration of an Epidural Bolus by the Acute Pain/Critical Care Outreach Registered Nurses and the Hospital at Night Team.

CONTROLLED DOCUMENT

CATEGORY:	Procedural Document
CLASSIFICATION:	Clinical
PURPOSE	This expanded practice protocol supports Acute Pain/Critical Care Outreach Nurses and the Hospital at Night Team in the Administration of an Epidural Bolus.
Controlled Document Number:	240.4 (Formerly CP 09B)
Version Number:	4
Controlled Document Sponsor:	Executive Chief Nurse
Controlled Document Lead:	Consultant Nurse Acute Pain/Critical Care Outreach
Approved By:	Executive Chief Nurse Executive Medical Director Consultant Nurse Acute Pain/Critical Care Outreach Hospital at Night Team Lead Consultant Anaesthetist Acute Pain
On:	September 2011
Review Date:	August 2014
Distribution:	
<ul style="list-style-type: none"> Essential Reading for: 	All Acute Pain/Critical Care Outreach and the Hospital at Night Team Nurses who administer an epidural bolus and all staff within the Acute Pain/Critical Care Outreach and Hospital at Night Teams who wish to expand their practice to include this skill.
<ul style="list-style-type: none"> Information for: 	All registered clinical staff

Expanded Practice Protocol for the administration of an epidural bolus by the Acute Pain/Critical Care Outreach nurses and the Hospital at Night Team.

EVIDENCE FOR PRACTICE

Historically the administration of bolus epidural analgesia could only be carried out by an anaesthetist. However, as an anaesthetist was not always available in person the possibility of a delay in achieving adequate analgesia for the patient could occur.

In accordance with the patients care requirements, as directed by the anaesthetist, registered nurses in the Acute Pain/Critical Care Outreach Team and the Hospital at Night Team (H@N) can administer an epidural bolus.

This can reduce the delay in providing patients with adequate analgesia in a timely way. the outcome for the patient is better quality of care, appropriate pain management, continuity of care and so an improved patient experience.

Effective post operative analgesia will improve respiratory function, encourage early mobilisation and thus reduce the incidence of associated complications facilitating an earlier recovery. Although continuous epidural analgesia is generally a very effective intervention for the management of patients in acute pain, there are times when the analgesic level is insufficient and 'breakthrough' pain occurs. In these circumstances rapid control of pain can be achieved by 'topping up' the epidural with a bolus dose.

A review of the expanded practice protocol has been undertaken to ensure the practice covered by this document remains up to date. This review has confirmed that the practice is up to date and therefore no significant changes have been made. As part of this review, an audit of practice has been commenced and is ongoing.

CONSENT

Although formal written consent is not required for minor procedures, verbal consent for the administration of an epidural bolus by the Acute Pain/Critical Care Outreach Team and the Hospital at Night Team must be obtained where possible and this must be documented in the patient's notes. For further information regarding consent and mental capacity please refer to the following documents:

- Department of Health Reference Guide to Consent for Examination or Treatment (2009).
- The Trust's Policy and procedural document for consent to examination or treatment (current version).
- *Mental Capacity Act (2005)*.

INDICATIONS

Expanded Practice Protocol for the administration of an epidural bolus by the Acute Pain/Critical Care Outreach nurses and the Hospital at Night Team.

N.B. The registered Acute Pain/Critical Care Outreach Nurse will administer an epidural bolus within normal service hours.

The H@N Team registered nurse will administer an epidural bolus within out of service hours.

The following must occur in order for the registered nurse in the Acute Pain/Critical Care Outreach Team or the H@N Team to administer an epidural bolus:

- The Acute Pain/Critical Care Outreach Team and the H@N Team have identified the necessity to deliver an epidural bolus based on an assessment of the individual patient's vital signs, a pain score of 2 or 3 and an inadequate block level.
- The assessment of the patient and the desirability of an epidural bolus have been discussed with a specialist registrar anaesthetist or consultant anaesthetist and documented in the medical notes and the bolus has been prescribed on PICS.
- The intravenous fluid to treat hypotension has been prescribed by the anaesthetist prior to administration of an epidural bolus.

CONTRAINDICATIONS

The registered nurse in the Acute Pain/Critical Care Outreach Team and the H@N Team will not deliver an epidural bolus in the following circumstances:

- The patient has capacity but does not give consent for the administration of an epidural bolus.
- The patient is under 16 years of age.
- The patient is suffering from shock/hypotension (systolic BP < 100mmHg).
- The anaesthetist is unavailable for support and advice as required.
- The patient does not have an established epidural block.
- The epidural block extends above T5.
- The patient has leakage present around their epidural site.
- The epidural bolus and intravenous fluids have not been prescribed by the anaesthetist.

LIMITATIONS TO PRACTICE

In the following circumstances, the registered nurse in the Acute Pain/Critical Care Outreach Team and the H@N Team must immediately refer the patient back to the medical staff:

- Manipulation of the epidural catheter is required in order to achieve appropriate pain relief.

If the registered nurse in the Acute Pain/Critical Care Outreach Team and the H@N Team is concerned at all about the patient's condition they must refer the patient to the specialist registrar anaesthetist or consultant anaesthetist for

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advice on any further action to be taken, and this must be recorded in the patient's notes.

CRITERIA FOR COMPETENCE

1. Registered nurses working in the Acute Pain/Critical Care Outreach Team or the H@N Team who has received education and training in delivering epidural bolus as recognised by the Nurse Consultant/Lead Nurse Acute Pain/Critical Care and/or the Nursing Manager for H@N Team.
2. Registered nurses working in the Acute Pain/Critical Care Outreach and the H@N Team must be competent and provide evidence of competence in:
 - Intravenous drug administration according to Controlled Document 232 (formerly CP 03): Expanded Practice Protocol for the administration of intravenous drugs and infusions (current version).
 - Care of epidural infusions according to Controlled Document 239 (formerly CP 09): Expanded Practice Protocol for the care of a continuous epidural infusion for the management of acute pain (current version).
3. Registered nurses working in the Acute Pain/Critical Care Outreach and the H@N Team must be familiar with the Trust Medicine Policy and Procedures (current version).
4. Registered nurses working in the Acute Pain/Critical Care Outreach and the H@N Team must be familiar with all types of epidural analgesia offered within the Trust.
5. Evidence of satisfactory supervised practice must be provided by the registered nurse working in the Acute Pain/Critical Care Outreach and the H@N Team as witnessed, initially on a minimum of two occasions, by a Consultant Anaesthetist, and thereafter by a practitioner who is already competent in the administration of an epidural bolus. (Appendix 1)
6. The number of supervised practices required will reflect the individual Acute Pain/Critical Care Outreach and the H@N Team registered nurse's learning needs.
7. Evidence of competence must be provided and a copy kept in the Acute Pain/Critical Care Outreach and the H@N Team registered nurse's personal file and in the department where the skill is practised (Appendix 2).
8. Registered nurses working in the Acute Pain/Critical Care Outreach and the H@N Team new to the Trust who have been performing the skill

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elsewhere must read and understand the protocol. Evidence of appropriate education and competence must be provided by the registered nurse before undertaking this expanded practice at the Trust.

9. Evidence of continuing professional development and maintenance of skill level will be required.
10. In accordance with codes of professional practice, the registered nurse working in the Acute Pain/Critical Care Outreach and the H@N Team has a responsibility to recognise, and to work within, the limits of their competence. In addition, the registered nurse working in the Acute Pain/Critical Care Outreach and the H@N Team has a responsibility to practice within the boundaries of the current evidence based practice and in line with up to date Trust and national policies and procedural documents. Evidence of continuing professional development and maintenance of skill level will be required and confirmed on an annual basis at the personal development review by the registered nurse working in the Acute Pain/Critical Care Outreach and the H@N Team line manager.

PROTOCOL AUDIT

The Consultant Nurse Acute Pain/Critical Care Outreach or the Senior Acute Pain/Critical Care Outreach Nurse will lead the audit of the protocol with support from the Practice Development Team. The audit will be undertaken in accordance with the review date and will include:

- Adherence to the protocol.
- Any untoward incidents or complaints.
- Number of registered nurses competent to deliver epidural bolus.

All audits will be logged with the Clinical Governance Support Unit.

CLINICAL INCIDENT REPORTING AND MANAGEMENT

Any untoward incidents and near misses should be dealt with by the appropriate management team. An incident form must be completed. The risk management team must be notified by telephone of any serious untoward incidents.

A list of registered Acute Pain/Critical Care Outreach nurses competent to perform this skill must be kept by the Consultant Nurse Acute Pain/Critical Care Outreach and a list of H@N Team registered nurses competent to perform this skill must be kept by the H@N Team Manager.

REFERENCES

Department of Health (2009) **Reference Guide to Consent for Examination or Treatment** 2nd edn. HMSO London

Mental Capacity Act 2005, <http://www.legislation.gov.uk/ukpga/2005/9/contents> [accessed 17.05.11]

University Hospitals Birmingham NHS Foundation Trust (2008) **Policy for consent to examination or treatment**, University Hospitals Birmingham NHS foundation Trust

University Hospitals Birmingham NHS Foundation Trust (2008) **Procedure for consent to examination or treatment**. Birmingham: University Hospitals Birmingham NHS Foundation Trust

BIBLIOGRAPHY

Chapman, S & Day, R. (2001) **Spinal Anatomy and the Use of Epidurals** Professional Nurse Vol 16, No 6

Cox, F (2002). **Making Sense of Epidural Analgesia** Nursing Times Plus, Vol 98, No 32

Cox, F. (2001) **Clinical Care of Patients with Epidural Infusions** Professional Nurse Vol 16, No 10

Doherty, L. Lister, S. (Eds) (2008) **The Royal Marsden Hospital Manual of Clinical Nursing Procedures**, 7th edn., Blackwell Publishing, Oxford

Hall, J. (2000) **Epidural Analgesia Management** Nursing Times, Vol 96, No 28

University Hospitals Birmingham NHS Foundation Trust Risk Assessment Documentation <http://uhbhome/Resources/RiskAssessmentDocs/Home.aspx> [accessed 08.08.11]

PROTOCOL SUBMISSION DETAILS

Protocol reviewed by:

[Redacted]
[Redacted]
[Redacted]
[Redacted]

Consultant Nurse Acute Pain/Critical Care Outreach
Consultant Anaesthetist
Lead Nurse Hospital 24/7
Practice Development Nurse

Protocol submitted to and approved by:

Executive Chief Nurse

Date:

Executive Medical Director

Date:

Consultant Nurse Acute Pain/Critical Care Outreach

Date:

Hospital at Night Team Lead

Date:

Consultant Anesthetist/Acute Pain

Date:

[Redacted]

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EVIDENCE OF SUPERVISED PRACTICE

To become a competent practitioner it is the responsibility of each registered nurse working in the Acute Pain/Critical Care Outreach and the H@N Team to undertake supervised practice in order to administer a registered nurse delivered epidural bolus analgesia in a safe and skilled manner.

Name of Registered nurse:

DATE	DETAILS OF PROCEDURE	COMMENTS	SATISFACTORY STANDARD OBSERVED BY (print name)	SIGNATURE AND DESIGNATION

UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST
CRITERIA FOR COMPETENCE

END COMPETENCE: PROTOCOL FOR THE ADMINISTRATION OF AN EPIDURAL BOLUS BY THE ACUTE PAIN/CRITICAL CARE OUTREACH NURSES AND THE HOSPITAL AT NIGHT TEAM

Date(s) of education and supervised practice:

Name of Registered Nurse:

Name of Supervisor:

Element of Competence To Be Achieved	Date Achieved	Registered Nurse Sign	Supervisor Sign
Discuss and identify <ul style="list-style-type: none"> • indications, • contraindications • limitations for the administration of an epidural bolus by the acute pain/critical care outreach registered nurses and the H@N Team according to this expanded practice protocol.			
Demonstrate competence in the assessment of pain and block level.			
Describe the procedure for administration of an epidural bolus (Appendix 3)			
Provide evidence of competency in Controlled Document 232 (formerly CP 03): Protocol for the administration of intravenous drugs and infusions			
Provide evidence of competency in Controlled Document 239 (formerly CP 09): Protocol for the care of a continuous epidural infusion for the management of acute pain.			
Demonstrate knowledge of the Trust Medicine Policy and Procedures (current version).			

Element of Competence To Be Achieved	Date Achieved	Registered Nurse Sign	Supervisor Sign
Demonstrate accurate provision of information to patient prior to the administration of an epidural bolus and obtain verbal consent.			
Demonstrate a working knowledge of UHB's policy for consent to examination or treatment.			
Demonstrate a working knowledge of the <i>Mental Capacity Act</i> .			
Demonstrate knowledge of specific drug effects and side effects of an epidural bolus.			
Demonstrate safe administration of an epidural bolus.			
Describe observations required following the administration of an epidural bolus.			
Demonstrate accurate provision of information to patient following the administration of an epidural bolus.			
Describe appropriate follow up care after the administration of an epidural bolus.			
Demonstrate accurate documentation following the administration of an epidural bolus.			
Outline potential complications of an epidural bolus and describe action to be taken in the event of any complications occurring.			
Discuss when to seek medical advice.			
Demonstrate maintenance of the patient's privacy and dignity throughout the procedure.			
Demonstrate safe infection control practices throughout the administration of an epidural bolus. To include: <ul style="list-style-type: none"> • Standard precautions • Aseptic non touch technique (where applicable) 			

Element of Competence To Be Achieved	Date Achieved	Registered Nurse Sign	Supervisor Sign
Demonstrate accurate record keeping.			
Discuss any health and safety issues in relation to this expanded practice			
Demonstrate an understanding of the incident reporting process.			

I declare that I have expanded my knowledge and skills and undertake the practice with accountability for my decisions and actions. I have read and understood the protocol for the administration of an epidural bolus by the acute pain/critical care outreach nurses and the H@N Team.

Signature of Registered nurse:

Print name:.....

Date:

I declare that I have supervised this registered nurse and found her/him to be competent as judged by the above criteria.

Signature of Supervisor:

Print name:.....

Date:

A copy of this record should be placed in the registered nurse's personal file and a copy retained by the individual for their Professional Portfolio.

GUIDELINES FOR THE ADMINISTRATION OF AN EPIDURAL BOLUS BY THE ACUTE PAIN/CRITICAL CARE OUTREACH NURSES AND THE HOSPITAL AT NIGHT TEAM

A registered acute pain/critical care outreach nurse administered epidural bolus will be undertaken within service hours. A specialist registrar anaesthetist or consultant anaesthetist will be contactable for advice and support.

A registered H@N Team nurse administered epidural bolus will be undertaken out of service hours (20.00-07.45 hrs.) A specialist registrar anaesthetist or consultant anaesthetist will be contactable for advice and support.

A prescription for bolus epidural medication and fluid to treat hypotension will be written prior to the epidural bolus being administered.

The following procedure will be followed:

PROCEDURE

1. Discuss suitability for registered nurse administered epidural bolus with anaesthetist and ensure there is a prescription for bolus epidural medication and IV fluids to treat any resulting hypotension.
2. Inform the patient about the procedure and obtain verbal consent.
3. Assess and document block height, pain and sedation score and vital signs. (Pain score is 2 or 3 AND the block level is inadequate).
4. Ensure patient is in bed and systolic BP is > 100 mmHg. Check epidural catheter site and ensure connections are patent.
5. Administer bolus via 10ml syringe directly down the epidural filter or as a clinician bolus using the CADD Solis pump: 5 – 10ml (maximum) of 0.25% or 0.125% plain bupivacaine or 0.125% levobupivacaine with 2mcg/ml fentanyl as prescribed. If a total of 10ml is given then the two doses, each of 5ml, should be administered 10 minutes apart.
6. Monitor and record vital signs every 5 minutes for 20 minutes after a dose.
7. Reassess and document the block height at 10 and 20 minutes after a dose.
8. If there are any concerns contact the anaesthetist.
9. Consider increasing the epidural infusion rate to prevent any recurrence of pain once the procedure is over and discuss this with the anaesthetist. Document events and any changes in epidural infusion rate in the patient's notes and on PICS.

HYPOTENSION

If systolic BP drops to < 90 mmHg at any time after an epidural bolus give IV fluid stat either:

- 250 – 500 ml Colloid
- or 500 – 1000 ml 0.9% Normal Saline

If systolic BP remains < 90 mmHg despite the infusion contact the anaesthetist.