

Management of Leg Weakness with Epidural Analgesia Clinical Guideline

V3.0

August 2019

Summary

Assessment of leg strength(Bromage)

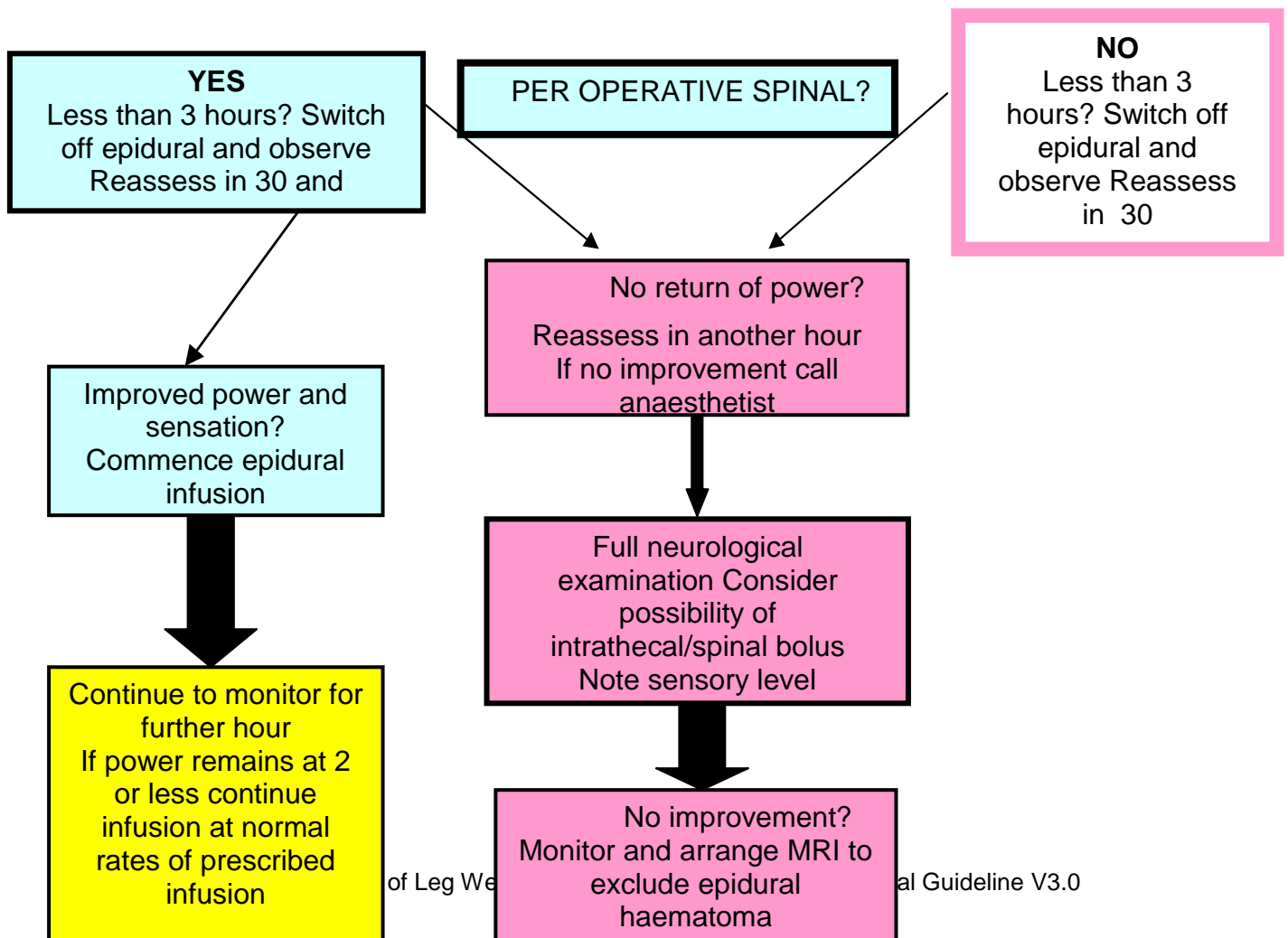
1. Full movement knees and feet
2. Just able to flex knees/free movement feet
3. Unable to flex knees/free movement feet
4. no movement or sensation

Assessment of Sensory Level

Assess dermatome level using pin prick or ethyl chloride
 Look for changing/decreased sensation as level of block

- Leg weakness in patients receiving epidural analgesia is due to either the local anaesthetic infusion or a spinal cord injury (Direct damage or spinal cord haematoma).
- The concentration of local anaesthetic used in epidural analgesic mixtures should never cause significant leg weakness unless the mixture is inadvertently infusing into spinal fluid!
- If spinal anaesthesia has been used in conjunction with an epidural (CSE) for postoperative analgesia there may be several hours post op before leg strength returns completely, however the effect of spinal local anaesthetic drugs should not last longer than 4 hours before some return of sensation and motor power should return preferably prior to commencement of epidural.

EPIDURAL IN SITU AND PATIENT HAS LEG WEAKNESS – GRADE 3 or 4



1. Aim/Purpose of this Guideline

1.1. The purpose of this guideline is to provide a framework for the management of leg weakness after epidural anaesthesia.

1.2. This version supersedes any previous versions of this document.

1.3. Data Protection Act 2018 (General Data Protection Regulation – GDPR) Legislation

The Trust has a duty under the DPA18 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed and documented. We can't rely on Opt out, it must be Opt in.

DPA18 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the DPA18 please see the 'information use framework policy', or contact the Information Governance Team rch-tr.infogov@nhs.net

2. The Guidance

Leg strength is a critical monitor of spinal cord health. Refer to the chart above.

3. Monitoring compliance and effectiveness

Element to be monitored	Adherence to RCHT guidelines
Lead	Pain service
Tool	Regular audit of the pain service is undertaken along with daily review of complicated cases.
Frequency	See above
Reporting arrangements	The committee reviewing the cases will be the anaesthesia directorate. Cases will be discussed at audit meetings and the details will be recorded in the minutes.
Acting on recommendations and Lead(s)	See above
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned within a month. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the ['Equality, Inclusion & Human Rights Policy'](#) or the [Equality and Diversity website](#).

4.2. *Equality Impact Assessment*

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Document Title	Management of Leg Weakness with Epidural Analgesia Clinical Guideline V3.0		
Date Issued/Approved:	23 July 2019		
Date Valid From:	August 2019		
Date Valid To:	August 2022		
Directorate / Department responsible (author/owner):	Anaesthesia and Theatre Directorate Acute Pain Team Lead Clinician Dr Nick Marshall		
Contact details:	Pain Clinic 01872 252792		
Brief summary of contents	Clinical Guideline for Management of Leg Weakness with Epidural Analgesia		
Suggested Keywords:	Pain, Epidural, Analgesia, Anaesthesia. Weakness		
Target Audience	RCHT	CFT	KCCG
	✓		
Executive Director responsible for Policy:	Medical Director, Dr Rob Parry		
Date revised:	July 2019		
This document replaces (exact title of previous version):	Clinical Guideline for Management of Leg Weakness with Epidural Analgesia V2.2		
Approval route (names of committees)/consultation:	Anaesthetic Department		
Divisional Manager confirming approval processes	Divisional Director: Dr Evans / Dr Debeer Divisional Manager: Roberta Fuller		
Name and Post Title of additional signatories	Not Required		
Signature of Executive Director giving approval	{Original Copy Signed}		
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet & Intranet	✓	Intranet Only
Document Library Folder/Sub Folder	Clinical / Anaesthesia		
Links to key external standards	AAGBI, RCOA, British Pain society		

Related Documents:	Best practice in the management of epidural analgesia and the hospital setting. November 2011 AAGBI
Training Need Identified?	No

Version Control Table

Date	Version No	Summary of Changes	Changes Made by (Name and Job Title)
1 May 11	V1.0	Initial Issue	Dr Anne Dingwall Pain Consultant
24 Oct 11	V2.0	Addition of Monitoring Compliance table.	Dr Anne Dingwall Pain Consultant
07 Jan 12	V2.1	Governance information moved to an appendix. EIA updated. Governance information amended to align with format of	Dr David Elliot Anaesthetic Consultant
11 Apr 15	V2.2	Updated governance information table to include KCCG.	Dr Juan Graterol
June 2019	V3.0	Reformatted into new trust standard	Dr Nicholas Marshall

All or part of this document can be released under the Freedom of Information Act 2000

This document is to be retained for 10 years from the date of expiry.
This document is only valid on the day of printing

Controlled Document

This document has been created following the Royal Cornwall Hospitals NHS Trust Policy for the Development and Management of Knowledge, Procedural and Web Documents (The Policy on Policies). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Initial Equality Impact Assessment Form

Name of the strategy / policy /proposal / service function to be assessed						
Management of Leg Weakness with Epidural Analgesia Clinical Guideline V3.0						
Directorate and service area: Theatres and Anaesthetics			New or existing document: Existing			
Name of individual completing assessment: Dr Juan Graterol			Telephone: 01872 252792			
1. Policy Aim*						
<i>Who is the strategy / policy / proposal / service function aimed at?</i>		<i>The purpose of this guideline is to provide a framework for the management of leg weakness after epidural anaesthesia.</i>				
2. Policy Objectives*		To provide information for the appropriate and safe management of leg weakness after epidural anaesthesia				
3. Policy – intended Outcomes*		Appropriate and safe management of leg weakness after epidural anaesthesia				
4. *How will you measure the outcome?		Monitoring through audit and case discussion at governance meetings.				
5. Who is intended to benefit from the policy?		Patients				
6a Who did you consult with		Workforce	Patients	Local groups	External organisations	Other
		X				
b). Please identify the groups who have been consulted about this procedure.		Anaesthetic Department				
What was the outcome of the consultation?		Agreed				

7. The Impact

Please complete the following table. **If you are unsure/don't know if there is a negative impact you need to repeat the consultation step.**

Are there concerns that the policy **could** have differential impact on:

Equality Strands:	Yes	No	Unsure	Rationale for Assessment / Existing Evidence
Age		X		
Sex (male, female, trans-gender / gender reassignment)		X		
Race / Ethnic communities /groups		X		
Disability - Learning disability, physical impairment, sensory impairment, mental health conditions and some long term health conditions.		X		
Religion / other beliefs		X		
Marriage and Civil partnership		X		
Pregnancy and maternity		X		
Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian		X		

You will need to continue to a full Equality Impact Assessment if the following have been highlighted:

- You have ticked "Yes" in any column above and
- No consultation or evidence of there being consultation- this excludes any *policies* which have been identified as not requiring consultation. **or**
- Major this relates to service redesign or development

8. Please indicate if a full equality analysis is recommended.	Yes		No	X
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9. If you are **not** recommending a Full Impact assessment please explain why.

Not Indicated

Date of completion and submission	23/07/2019	Members approving screening assessment	Policy Review Group (PRG) APPROVED
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This EIA will not be uploaded to the Trust website without the approval of the Policy Review Group.

A summary of the results will be published on the Trust's web site.