Peripheral nerve catheter: daily review audit

Any perineural or fascial plane catheter. One sheet per catheter, one column per day.

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NORTHWEST REGIONAL ANAESTHESIA ALLIANCE

CATHETER INSERTION

Audit no. _____ Date _____ Age _____ **Sex** ☐ F ☐ M **ASA** ☐ 1 ☐ 2 ☐ 3 ☐ 4 Weight (kg) _____ Height (cm) _____

Indication _____ Catheter site and side _____ Date and time inserted _____

Operator grade _____ **Asepsis** ☐ Sterile gloves ☐ Gown ☐ Mask and hat ☐ Chlorhexidine ☐ Large drape ☐ Probe cover

Depth at skin (cm) _____

Fixation ☐ Dressing only ☐ Tunnelled ☐ Glue ☐ Anchor device **Anticoagulant or antiplatelet** ☐ No ☐ Yes Which _____

REGIMEN

Drug and concentration (%) _____ **Mode** ☐ Programmed intermittent bolus ☐ Infusion ☐ Patient-controlled bolus ☐ Manual

mL per bolus or mL/h _____ Interval (h) _____ Maximum in 24 h (mg) _____

DAILY REVIEW

	Day 1	Day 2	Day 3	Day 4	Day 5
Date and reviewer					
Pain at rest / on movement (0-10)					
Local anaesthetic given in 24 h (mg)					
Dose within maximum (Y / N)					
Rescue opioid in 24 h (mg)					
Motor block: none / partial / dense					
Able to do physiotherapy (Y / N)					
Site: clean / red / tender / pus					
Leak: none / damp / wet					
Depth at skin (cm)					
Dressing intact (Y / N)					
Signs of toxicity (Y / N)					
Temperature (°C)					
Anticoagulant timing checked (Y / N)					
Plan: continue / bolus / remove					

REMOVAL

Date and time _____ Days in situ _____

Reason ☐ Planned ☐ Dislodged ☐ Not working ☐ Leak ☐ Infection suspected ☐ Patient request **Tip intact** ☐ Yes ☐ No

Tip sent for culture ☐ No ☐ Yes Result _____ **Timed with anticoagulant** ☐ Yes ☐ No ☐ Not applicable

COMPLICATIONS

☐ None ☐ Local anaesthetic toxicity ☐ Infection needing antibiotics ☐ Haematoma ☐ Fall with motor block ☐ Nerve symptoms after removal ☐ Pump or programming error

Peripheral nerve catheter: daily review audit: notes and standards

How to use the sheet, suggested standards and references.

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HOW TO USE THIS SHEET

- Start the sheet at insertion and keep it with the pump prescription. The acute pain team or anaesthetist completes one column at each daily review.
- Add up all local anaesthetic given in the previous 24 hours, including boluses, and check it against the maximum for the dosing weight.
- Check the depth at skin and the dressing every day; a change in depth with poorer analgesia suggests migration.

SUGGESTED STANDARDS (SET LOCALLY)

Standard	Target
Daily review documented for every catheter day	100%
24-hour dose within maximum	100%
Full aseptic precautions at insertion	100%
Removal timed against anticoagulant doses in line with local policy	100%
Unplanned removal (dislodged, leak, failure)	Report the rate
Catheter site infection	Report the rate

BACKGROUND

- Continuous peripheral nerve blocks prolong analgesia and can be titrated, at the cost of catheter-specific problems such as dislodgement, leakage and infection, which are the events this sheet counts.[1]
- Count every source of local anaesthetic against one maximum.[2]
- For catheters placed for rib fractures, use the rib fracture audit sheet as well, which adds peak flow and cough.

REFERENCES

1. Ilfeld BM. Continuous peripheral nerve blocks: an update of the published evidence and comparison with novel, alternative analgesic modalities. Anesth Analg 2017; 124: 308-35. https://doi.org/10.1213/ANE.0000000000001581
2. El-Boghdadly K, Pawa A, Chin KJ. Local anesthetic systemic toxicity: current perspectives. Local Reg Anesth 2018; 11: 35-44. https://doi.org/10.2147/LRA.S154512
3. Hamilton GM, MacMillan Y, Benson P, et al. Regional anaesthesia quality indicators for adult patients undergoing non-cardiac surgery: a systematic review. Anaesthesia 2021; 76 (Suppl 1): 89-99. https://doi.org/10.1111/anae.15311