PERIPHERAL NERVE BLOCK FOLLOW UP AND INITIAL MANAGEMENT OF POSTOPERATIVE UNEXPECTED/PERSISTENT NEUROLOGICAL DYSFUNCTION

**Review within 48h of PNB**

Is neurological dysfunction suspected?

- **YES**
  - Is pre-op and post-op deficits consistent?
    - **YES**
      - Document deficit was pre-existing
    - **NO**
      - **NEW ONSET** neurological deficits
        paraesthesia (numbness/tingling), weakness, unexplained excessive pain
        OR
        Effect of the block lasting **LONGER** than expected
        (>48h after single injection)
      - Inform responsible Surgical and Anaesthesia team
      - Review medical, anaesthetic and surgical records
      - Assess all functions of nerve, observe skin for colour changes, swelling and check pulses
      - Consider loosening bandages, splitting Plaster of Paris splints and gentle repositioning of the limb

- **NO**
  - **Is pain well controlled?**
    - **YES**
      - Continue with multimodal analgesia
    - **NO**
      - Review analgesia plan
      - Consider multimodal analgesia

**Is motor function affected and/or symptoms progressive and/or the deficit painful?**

- **YES**
  - **URGENT LESION**
    - Likely block related lesion
      - Consider: Compression of nerve (e.g., haematoma)
    - Likely surgery related lesion
      - Consider: Compartment syndrome, nerve trauma or compression from suture/bone fragments/haematoma
    - **Seek URGENT HELP**
      - Senior surgical and/or neurology consultation
      - **IMMEDIATE / URGENT** Surgical decompression may be required
      - **Consider URGENT ultrasound/MRI**
        - NB: Differential diagnosis should include Post-surgical Inflammatory Neuropathy
    - **Reassure patient**
      - Protect the limb ➔ Consider sling or splint and advise care for numb areas to prevent pressure sore
      - **Consider early involvement of Chronic Pain Team if appropriate**
        - (especially if allodynia +/- hyperalgesia present to exclude/treat CRPS)
    - **Review in 2-4 weeks** ➔ If persisting deficit:
      - Consider neurophysiology studies and image test
        (Nerve conduction studies, electromyography, MRI)
      - Refer for local neurology consultation or nerve injury specialist

- **NO**
  - **NON-URGENT LESION**
    - Likely surgery related lesion
      - Consider: Positional pressure related nerve injury, damage to the nerve at the surgical site or by prolonged/excessive tourniquet
    - Likely block related lesion
    - **Reassure patient**
    - **Protect the limb** ➔ Consider sling or splint and advise care for numb areas to prevent pressure sore
    - **Consider early involvement of Chronic Pain Team if appropriate**
      - (especially if allodynia +/- hyperalgesia present to exclude/treat CRPS)
    - **Review in 2-4 weeks** ➔ If persisting deficit:
      - Consider neurophysiology studies and image test
        (Nerve conduction studies, electromyography, MRI)
      - Refer for local neurology consultation or nerve injury specialist

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References: