Algorithm for management of nerve injury associated with regional anaesthesia

Suspected nerve injury defined as:
- New onset of pain, weakness, numbness, paraesthesia or other abnormal sensation
- Effects lasting beyond the usual duration of the specific block (e.g. if a single shot peripheral nerve block (PNB) lasts >48 hours)

- Review relevant medical & surgical history
- Review of operation and anaesthetic records, drug chart and observations chart
- Clinical examination including neurological examination by the responsible surgical team

NB: In case of suspected space occupying lesion (SOL) associated with central neuraxial blocks, treat as emergency and follow local Guidelines for management of Epidural Analgesia

Mild or resolving symptoms or persistent sensory deficit

- Reassure the patient & review in 4 weeks

Yes

- Neurological referral
- Consider:
  - MRI and other imaging
  - Nerve conduction tests (NCT)
  - Electromyography (EMG)

No

No further follow up required

Persistent symptoms

Complete or progressive neurological deficit or presence of motor deficit

- Inform the responsible surgical and anaesthetic team and, if applicable, Acute Pain Service
- Consider surgical cause (e.g. haematoma, cut, stretch injury etc) and appropriate intervention (decompression, reconstruction etc)
- Consider further imaging (particularly, if space occupying lesion is suspected* and emergency decompression is needed)
  - Immediate neurological referral
  - Nerve conduction tests (NCT)
  - Electromyography (EMG)

- Definitive diagnosis
  - Conservative treatment (drugs; physiotherapy etc) or
  - Surgical intervention (as above)
  - Keep the patient and responsible team informed
  - Follow up as appropriate

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