

PAEDIATRIC REGIONAL ANAESTHESIA

Paediatric Regional anaesthesia is often used in combination with general anaesthesia to provide analgesia. It is less commonly used as a sole anaesthetic technique. Its advantages include attenuation of stress response, reduction of opioid requirements (and its associated side effects) and effective peri-operative analgesia.

Nerve blocks commonly performed include penile nerve blocks, ilioinguinal and iliohypogastric (IG-IH) nerve blocks, femoral and sciatic nerve blocks, caudals, epidurals and spinals.

The regional anaesthetic technique may be continued post-operatively as part of the Acute Pain Service (APS) protocol.

Paediatric regional block workflow in our department

1. Most, if not all blocks are done under GA / sedation and appropriate monitoring must be present.
2. Estimated duration and possible side effects of block should have been advised *before* induction, using the “blue” patient information sheet (found in clear folder at the APS box in MOT recovery).
3. All decisions for regional blocks must be discussed with the anaesthetist-in-charge, and agreeable with surgeon.
4. If a continuous nerve block technique is planned, ensure that the patient returns to a ward with adequate nursing support.
5. Inform the anaesthetic nurse to allow time for preparation of ultrasound machine and nerve block trolley. Additional help must be available if the induction room is set up for induction (ensure availability of anaesthesia machine and monitors) and regional block under GA.
6. **Nerve block ‘time out’** must be performed and documented in the anaesthetic chart, checking for identity of patient, site of surgery, type of block to be given, LA drug (expiry date, dose, and any additive) to be used.
7. Appropriate analgesics must be prescribed in anticipation of *breakthrough pain*, and ideally timed with resolution of block. *Eg. PO oxycodone 5 mg 6 hrly strictly x 2 days then prn. Serve first dose at 6 pm (4 hrs post-block)*

8. Other **post-block instructions** including pressure care (of numb limb) and fall precautions can be typed in the post-operative orders on the OT computer, or indicated by selecting the 'post-block tick box' on the OT PACS system.
9. Review post-block patients in the recovery room (+ ward for inpatients) for pain score and block resolution. Reinforce postoperative care & monitoring of anaesthetized limb to recovery and ward nurses.
10. In our department, the following patients **MUST** be followed up on the **Acute Pain Service (APS)**:
 - Continuous central neuraxial block
 - Eg. Epidural, Caudal epidural
 - Continuous peripheral nerve blockade
 - Post-caudal (single shot) with additives
11. All post-opt analgesia for patients on APS must be ordered by the anaesthetic team in the CLMM before they return to the ward.
12. Motor blockade must be followed up by the APS team(office hours)/ on-call team(after office hours) and **ALL** persistent motor blockade **MUST** be highlighted to the anaesthetic team who performed the block.