

**Management of Inadvertant Dural Puncture in Children**

Following Dural Tap with a Tuohy Needle

**Immediate management**

Clinicians discretion, either;

* Resite epidural in a different interspace. High blocks may occur as a result of increased effect of CSF spread.
* Proceed under spinal anaesthesia. Suggested doses
  + Infants 0.5-0.6mg/kg (0.1-0.12mL/kg of 0.5% bupivacaine)
  + 1-7 yr olds 0.3-0.5mg/kg (0.06-0.1mL/kg of 0.5% bupivacaine)
  + >7 yr olds 0.2-0.3mg/kg (0.04-0.06mL/kg of 0.5% bupivacaine)
* Abandon procedure and use intravenous opioids.

**Post procedure management**

* Inform parents, patient (if appropriate), nursing staff and surgical team. Document on anaesthetic chart, epidural chart and in the patient’s notes. Include postoperative recovery instructions in addition to routine observations.
* Explain that the patient may develop a postural frontal headache, photophobia, tinnitus and nausea and vomiting. Symptoms are relieved by lying flat and most dural headaches resolve spontaneously by one week. Advise nursing staff to contact 1109 or 1061 if symptoms develop.
* Fill in pain audit form and inform anaesthetist on call. These patients need to be seen on the pain ward round twice a day.
* Prescribe paracetamol, ibuprofen (if not contraindicated) and movicol.
* Patients must be kept well hydrated, avoid straining and constipation, and lifting and heavy activity.
* Consider drinks with caffeine.
* A blood patch may be considered in patients with persistent headaches.

**If called to see patient on the ward for unknown post-dural puncture headache (PDPH)**

* Check anaesthetic chart and ward notes to see if patient had a neuraxial block or a dural puncture documented.
* Assess patient for symptoms, severity, pyrexia and analgesic usage.
* Consider other intracranial pathology and rule out other causes of symptoms. Refer to paediatric team if in doubt.
* If you suspect a post-dural puncture headache, prescribe regular analgesics and encourage oral fluids.
* Inform anaesthetist who performed procedure of your findings and on call consultant.
* Make sure patient is handed over to 1061 and seen twice a day on pain ward round.

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