# Intrathecal Catheter Tip Sheet



# Catheter Depth of Insertion

Evidence on optimal depth lacking. Shorter lengths more likely dislodged. Longer lengths increase risk of paresthesia. Most studies report 2-4cm. **Suggest depth < 5cm.** 



#### Communication

Let the patient and the patient's entire care team know that a spinal catheter is in place. Early communication regarding emergencies critical. Rapid boluses of catheter should be avoided.



# Aseptic Technique

Use strict aseptic technique. Ideally draw up meds with a filter needle and inject via a filter. **No-touch technique** when handling catheter hub. **DO NOT SCRUB THE HUB**. Chlorhexidine and alcohol are neurotoxic! Secure connections tightly to avoid CSF leakage and contamination..



# Top off Doses

Can use up to 2ml of pump infusion solution. Alternatively, manual bolus of 2.5mg bupi (1ml 0.25% bupi) and fentanyl 10 - 15 mcg. Closely communicate with other members of the care team regarding management.



### **Analgesia Initiation**

Recommendation - 2.5mg isobaric bupi (1 ml 0.25% bupi) with fentanyl 10 - 15 mcg. Confirm positive CSF aspiration before every dose. Account for dead space of catheter and filter whenever administering boluses. Negative aspiration does not 100% rule out still intrathecal.



### Cesarean Delivery

Preferably dose catheter in the OR with monitors on. Dose incrementally to avoid a high spinal, no faster than q 3 minutes. No more than 0.3-0.5ml hyperbaric bupi 0.75% at a time. Add fentanyl 15 mcg and PF morphine 100 mcg.



#### **Maintenance**

Optimum regimen unknown. Boluses and continuous infusions both reported, most commonly with low dose bupivcaine/fentanyl solutions at rates from 1-5 ml/hr. No PCEA. 0.1 - 0.125% bupi with fentanyl 2 - 2.5 mcg/ml solutions are suitable.



# Timing of Removal

Remove at earliest opportunity after delivery to minimize risks of overdose or infection. If left in place (e.g. in setting of coagulopathy) consider precautions like knotting the catheter.



#### Labeling the Catheter

Label catheter clearly near to the hub and label the pump. Document about the type of catheter on unit shared patient status board.



### Follow-Up

Ensure that the patient has received written information about the dural puncture and risk of headache. Follow up daily for min 72 hrs postpartum, or UNTIL HEADACHE RESOLUTION.

This content does not constitute medical advice, establish a standard of care, or replace clinical judgment. Providers should rely on their own training, institutional policies, and patient-specific assessment when making clinical decisions. Evidence on best practices are limited. Caution is required due to the risk of high or total spinal anesthesia.

Adapted from : Guidelines from the Obstetric Anaesthetists' Association. Anaesthesia. 2024 Dec;79(12):1348-1368.