

Pediatric Spinal Dosing

Most anesthesiologist and CRNAs will have little clinical experience with pediatric spinals, but it is an extremely easy way to provide anesthesia and analgesia for short (90-120 min) lower abdominal and lower extremity procedures. It is far less resource intensive than either sedation or a GA for these procedures. Children are remarkably hemodynamically stable under SAB. Many practitioners wait to start an IV until the spinal is in and then place it in the lower extremity.

A short 1-½ inch spinal needle is nice but not essential (any 22 G or smaller spinal needle will do), betadine prep, some local anesthetic and some D50 for making the solution hyperbaric is all that is required.

Sit small children up and scrunch them into a ball and for the older kids have them either sit or lay on their sides. Most of these kids will be content to hold your hands if you put a drape up so they can't see what is going on.

Most require no oxygen or sedation. They are very easy to manage in the PACU.

You can do a large number of cases with a handful of spinal needles because no spinal kit is needed.

Be careful not to let the nurses raise an infant's buttocks into the air to put on a bovie pad or you may get a high spinal.

Pediatric Spinal Dosing

Drug	Dose	Formulation
Tetracaine	0.4-0.6mg/kg	1.0% tetracaine in D10 solution
Bupivacaine	0.5mg/kg	0.75% or 0.5% Mix with D50 to make D10 solution
Ropivacaine	0.5mg/kg	1.0% Mix with D50 to make D10 solution
Lidocaine*	2mg/kg	2.0% or 5% Mix with D50 to make D10 solution

**Add 10ug of epinephrine to the solutions to increase length of block (120 min)
Inject slowly over 20 seconds**

No personal experience with lidocaine in infants and children. All the others have been successfully used in remote and austere environments.