Spinal Anaesthesia

Anaesthetic Department, AMH

NHS Grampian

Caesarean Section

All Anaesthetists at AMH use the same standard mixture of drugs for spinal anaesthesia for Caesarean sections. This reduces the risk of drug error as the anaesthetic assistant gives the drugs in the same order each time.

- Prepare all spinal drugs using strict aseptic technique.
- Mix 5 mg Diamorphine in 5 ml 0.9% NaCl.
  - Use sterile wrapped saline.
  - Your assistant will open the Diamorphine ampoule and hold it for you.
- Add 0.5 ml (500 mcg) Diamorphine to a 1 ml syringe.
- Give the remaining Diamorphine in the 5 ml syringe to your anaesthetic assistant who will then give you the 4ml, 0.5% Hyperbaric Bupivicaine ampoule.
- Add the 0.5 ml Diamorphine to the 4 ml of 0.5% Hyperbaric Bupivicaine.
- Draw up this mixture in to another 5 ml syringe using the bacterial filter.
- If you are doing the spinal in the sitting position, the usual dose is 3.0 ml.
  - This works out at 333 mcg Diamorphine and 13.3 mg Bupivicaine.
- If you are doing the spinal with the patient in a lateral position, the usual dose is 2.5 ml.
  - This works out at 277 mcg Diamorphine and 11.1 mg Bupivicaine.

Dose adjustment will be required at extremes of height and in early gestation or IUGR. **Hypotension** should be treated as soon as the blood pressure begins to fall. See Caesarean Section - Management of Blood Pressure.

Testing the Block

Spinal anaesthesia has a very high success rate. Injecting the right volume of the right agents in the right place leads to this very high success rate. No test of spinal block will reliably predict all those that will fail. There is neither a consensus nor scientifically sound evidence that testing touch is superior to testing for cold.

The decision whether to proceed under a spinal requires assessment of several factors. Worrying signs are cold sensation at T4 or lower, touch sensation at T8 or lower and/or a poor motor block in the legs. The context of the individual case must also be considered when deciding if a spinal is adequate.

- If the block is doubtful, the mother should be included in the discussion about how to proceed.
- Remember that being over-cautious and unnecessarily repeating spinals may also cause problems with high spinals or undetected nerve damage due to pre-existing numbness. Similarly a GA is not without risk.
- Assessment and management of spinals is part of the training during the Obstetric block, so please discuss any concerns with the consultants at this time.

- This guidance is intended to supplement and not replace current teaching
- Trainees are encouraged to use their attachments in AMH to develop their practice in this area, and to discuss these issues with consultant colleagues.

Saddle Block Spinal

Useful for repair of bad lacerations to the perineum, 3rd degree tears etc. following delivery. Also good for vaginal delivery but only if there is absolutely no possibility that the vaginal delivery may fail and a Caesarean section be required – i.e. it's not an option for trial of vaginal delivery.

Also not suitable for unexplained PPH which might involve the cervix or even lower uterine segment or for a retained placenta which needs a level of T8.

- Sit the patient up; this may be difficult if she is in 2nd stage or has a 3rd degree tear.
- Inject 1.5 ml 0.5% Hyperbaric Bupivicaine.
- Remove needle and after 5 to 10 minutes in the sitting position, lie the patient down.