High Regional Anaesthesia

This has an incidence of 1 in 27,000 epidurals and is a more accurate term to describe total spinal anaesthesia. The latter implies loss of consciousness. ‘High regional block’ may be defined as an excessively high block (whatever the mechanism) requiring tracheal intubation. The following relates to unrecognised intrathecal catheter placement and the ensuing high block.

Drill For High Regional Block in Obstetrics

1. Recognise early!
2. Features: - weakness and/or tingling of the upper arms and shoulders, neck and jaw
- difficulty breathing
- slurred speech and hoarseness
- sedation / anxiety
- high level of insensitivity to cold and touch

Although typically early and rapidly ascending, symptoms and signs may develop late and insidiously.

3. Management: - ABC – approach --> give oxygen if not already doing so.
- call for help
- treat hypotension aggressively with uterine displacement, vasoconstrictors (ephedrine, phenylephrine, metaraminol and adrenaline are all suitable in the face of severe maternal hypotension) and intravenous fluids.

Maternal blood pressure must be restored to prevent cardiac arrest.

4. Consider the patient’s partner – explain the situation and allocate a team member to escort him out of the room as soon as possible.

5. Prepare for tracheal intubation if a rapidly ascending block reaches the shoulders and breathing is affected. Use a rapid sequence induction with cricoid pressure.

6. Monitor baby: - consider urgent delivery of the baby
- if CTG / fetus ok may still deliver vaginally after high block has subsided in epidural analgesia

7. Keep the patient anaesthetised and ventilate her lungs. Assess the adequacy of spontaneous ventilation carefully before awakening and tracheal extubation. Remember that peripheral nerve stimulation will not indicate the degree of recession of the block.

8. If intubation is difficult or fails, do not wait for the return of spontaneous ventilation – it may not occur. Proceed with emergency airway management and IPPV (see failed intubation drill).

9. Consider alternative diagnoses, e.g. subarachnoid haemorrhage.

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1 Kar GS and Jenkins JG. High spinal anaesthesia: two cases encountered in a survey of 81,322 obstetric epidurals. IJOA 2001;10:189-191
2 Yentis & Dob. High regional block- the failed intubation of the new millenium? IJOA 2001;10:159-161