



Clinical Guidelines

Decreased Conscious Level

Document Control Information

Author	P Ramnarayan	Author Position	Consultant
Document Owner	E. Polke	Document Owner Position	Service Coordinator
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1. Assessment

Aetiology

- Meningoencephalitis
- Hypoxic ischaemic injury
- Space occupying lesion, hydrocephalus
- Status epilepticus, post ictal
- Trauma (including NAI)
- Shock
- Respiratory failure
- Poisoning
- Metabolic/electrolyte abnormality (including glucose)
- Vascular
- Hypertension

2. Initial management

2.1 Ensure patent airway

2.2 Give 100% oxygen via face mask with reservoir bag

2.3 Give 20 mls/kg fluid bolus if signs of shock and reassess

2.4 Check glucose – if glucose < 3mmols/l treat with 2mls/kg of 10% dextrose

2.5 Check urea, electrolytes, calcium and magnesium

Do not perform a Lumbar puncture in a child with a reduced level of consciousness.

Normal CT scan does not rule out raised intracranial pressure.

2.6 Assess neurology frequently

- Pupil size and reactivity
- Ophthalmoplegia
- Level of consciousness (Glasgow Coma score or AVPU)
- Posture/tone
- Reflexes
- Evidence of seizures
- Fundal changes – haemorrhage/papilloedema

2.7 Assess for signs of raised ICP

- Bradycardia
- Hypertension
- Pupillary dilatation or asymmetry
- Abnormal breathing pattern
- Abnormal posture

2.8 If signs of raised intracranial pressure, consider

Mannitol 0.25g/kg or hypertonic saline (2.7% or 3% saline) 3 ml/kg – Aim for Na 145 mmol/l

2.9 Cefotaxime (or Ceftriaxone), Aciclovir and a macrolide antibiotic should be given if the aetiology is uncertain

2.10 Urgent CT scan (+/- contrast)

2.11 Serum and urine for toxicology if appropriate

3. Indications for intubation

3.1 $GCS \leq 8$ or $AVPU \leq P$

3.2 Loss of airway reflexes

3.3 Ventilatory insufficiency (Hypercarbia: $PaCO_2 > 6$; Hypoxia: $SpO_2 < 92\%$ in high flow O₂)

3.4 Obtunded/agitated

3.5 Consider intubation when CT scan cannot be performed safely otherwise

3.6 Status epilepticus unresponsive to APLS management protocol

4. Management of the child requiring intubation

4.1 Rapid sequence induction with thiopentone and suxamethonium. See CATS intubation guideline

4.2 Sedate with morphine and midazolam infusions

4.3 Insert OGT and place on free drainage

4.4 Commence 2/3 calculated maintenance with 0.9% saline (NB: monitor glucose)

5. Transport considerations

5.1 Manage as for raised ICP

- Ventilate to normocarbia
- Maintain adequate cerebral perfusion pressure
- Normothermia
- Nurse head up to 30 degrees and midline

5.2 Monitor pupils

5.3 Consider mannitol or 3% saline if signs of raised ICP (take pre-prepared bolus)

5.4 Monitor glucose

Take copies of CT scans if not already transmitted to receiving centre