The Faculty of Intensive Care Medicine

Stabilisation for Neurological Testing (Adults)

For use once sedation is discontinued and testing for death using neurological criteria is planned.

CVS

Cardiovascular instability is expected with brainstem dysfunction.

- Correct any instability.
- Ensure central access.
- Start Noradrenaline as needed.
- Low threshold to start vasopressin.

DIABETES INSIPIDUS

Urine output more than 200mls/hr with rapidly rising sodium?

- Is this diabetes insipidus?
- If yes, treat with DDAVP.
- Do not wait for osmolarities.
- Low threshold to start vasopressin.

Na^+

ELECTROLYTES

Aim for normal levels. Disturbances are common.

Testing requires:

- Sodium 125 – 160 mmol/L
- Potassium over 2.0 mmol/L
- Magnesium 0.5 – 3.0 mmol/l
- Phosphate 0.5 – 3.0 mmol/L (Low or unavailable phosphate delays testing)
- Glucose 3 – 20 mmol/L

PO_4^{3-}

TEMPERATURE KEEP OVER 36°C

Hypothermia can delay the return of brainstem function.

- Commence hourly (and consider continuous) temperature monitoring.
- Only transient (less than 6-hours in total) reductions in temperature below 36°C are allowed in the 24-hours before testing.

DRUGS

- DDAVP (desmopressin) 0.5 – 4 mcg intravenous.
  If two doses required in a short time frame, low threshold to start vasopressin.
- Vasopressin 20 units in 50mls 5% dextrose; rate 1.2 to 10mls/hr.
- Follow unit drug dosing if different to above.

OTHER CONSIDERATIONS

- In hypoxic brain injury, observation before neurological testing is at least 24 hours following the loss of the last observed brainstem reflex or spontaneous breath.
- Target normal respiratory parameters. Bronchoscopy as required. Continue physiotherapy.
- If testing is planned, check ears for wax.

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