

SODIUM CHLORIDE

ACTION and USES

Sodium is one of the main extracellular cations essential in many physiological processes. It is sometimes necessary to supplement preterm babies because of the high renal tubular sodium loss. Babies with stomas may require supplementation even if they have normal serum sodium. It is used to treat or prevent hyponatraemia, defined as $<132\text{mmol/l}$. Use sodium chloride 0.9% if possible or glucose 5 % with sodium chloride 0.9%. Only make up solutions on the ward if these are not suitable or urgent correction is required.

DOSAGE

IV: Maintenance: 3mmol/kg/day .
Severe or resistant hyponatraemia: 6mmol/kg/day increasing if necessary.
Fitting or obtunded secondary to hyponatraemia ($<120\text{mmol/l}$): 3mmol/kg over 1 hour

ORAL: 1mmol/kg every 6 hours. Higher doses maybe required for babies with stomas.

ADMINISTRATION

Normally by continuous intravenous infusion.
If urgent correction is required use sodium chloride 3%.

RECONSTITUTION

Sodium Chloride 0.9% contains approximately 0.15mmol/ml
Sodium chloride is available as a 30% solution containing 5mmol/ml in a 10ml ampoule which **must be diluted** before administration.

Sodium Chloride 0.9% in Glucose 10% (500ml bag) which contains approximately 0.15mmol/ml sodium ions approx.

Remove 15ml solution from a 500ml bag of glucose 10% and discard, add 15ml of sodium chloride 30% to the bag of glucose 10% and SHAKE WELL TO MIX.

A dose 6mmol/kg/day will be provided by 40ml/kg/day

Sodium chloride 3% containing 0.5mmol/ml sodium ions

Add 1ml of sodium chloride 30% to 9ml of water for injections and shake well to mix.

This should be infused ideally via a central line.

Other compatible diluent

Glucose 20%

INCOMPATIBILITIES

Do not mix or infuse with mannitol

STORAGE

Opened ampoules should be discarded immediately after opening. Do not store diluted solutions. Unopened ampoules are stored in the IV drug cupboard.

MONITORING

Monitor serum sodium and chloride ions. Observe for vein irritation and thrombophlebitis.