SODIUM CHLORIDE 3%

Newborn use only

2020

Alert	Osmolarity: 1027 mOsm/L.[1] Sodium supplementation is not always appropriate and fluid restriction may be appropriate in the management of hyponatraemia. Treatment should always be tailored to the cause.
Indication	Treatment of hyponatraemia.
Action	Sodium is the major cation of extracellular fluid.
Drug type	Sodium chloride 3% contains 30 g/L sodium chloride, equivalent to 0.5 mmol/mL of sodium.
Trade name	Sodium chloride 3%
Presentation	Sodium chloride 3% – 1000 mL.
Dose	**Severe hyponatraemia < 120 mmol/L or symptomatic hyponatraemia** IV: Sodium chloride 3% at 0.5 mmol/kg/hour (1 mL/kg/hour) until symptoms abate or sodium ≥ 120 mmol/L.* Then give sodium chloride 3% at 0.15 mmol/kg/hour (0.3 mL/kg/hour) for 48 hours or until desired sodium is achieved. Therapeutic goal is to increase sodium by 7 mmol/L/day *1 mL/kg sodium chloride 3% will raise serum sodium by approximately 1 mmol/L.[2] **IV supplementation** Start at 2–4 mmol/kg/day and increase as required.
Dose adjustment	Therapeutic hypothermia – No information. ECMO – No information. Renal impairment – No information. Hepatic impairment – No information.
Maximum dose	
Total cumulative dose	
Route	IV
Preparation	**Not applicable**.
Administration	Can be given undiluted as an infusion, preferably through large vein.
Monitoring	Local IV site for signs of extravasation. Serum sodium as per clinical team's recommendation.
Contraindications	No information.
Precautions	Impaired renal function, cardiac insufficiency, pre-existing oedema with sodium retention.
Drug interactions	No information.
Adverse reactions	Hypernatraemia, volume overload, congestive heart failure, respiratory distress. Hyperchloraemia, hypercalciuria. Disseminated intravascular coagulation (DIC) is associated with inadvertent injections of sodium chloride into blood vessels of the uterus or placenta due to hypernatraemic shock; not reported in infants. Osmotic demyelinating syndrome. Fever. IV site: Extravasation, phlebitis, venous thrombosis.
Compatibility	**IV Fluids:** Glucose 5%, glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.9%, sodium chloride 0.45%. **Y site**: No information.
Incompatibility	**IV Fluids:** Fat emulsion. **Y site**: No information. Amino acid solutions – No information.
Stability	
Storage	Store at room temperature, 20–25°C
Excipients	
Special comments	Osmolarity of undiluted hypertonic sodium chloride is > 1000 mOsm/L, posing the risk of extravasation for peripheral IV solutions.[3,4] Monitor for extravasation when infused peripherally at higher rates. Total body water is traditionally calculated as weight x 0.6 in children. Greater total body water content in newborns should be considered and therefore should be calculated as weight x 0.75.[2,5]
Evidence	Refer to full version.

Practice points	Refer to full version.
References	Refer to full version.

VERSION/NUMBER	**DATE**
Original	**06/09/2017**
Current 2.0	15/12/2020
REVIEW	15/12/2025

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