

Government of Western Australia North Metropolitan Health Service Women and Newborn Health Service



NEONATAL MEDICATION GUIDELINE

Sodium Chloride

Scope (Staff): Nursing, Medical and Pharmacy Staff

Scope (Area): KEMH NICU, PCH NICU, NETS WA

This document should be read in conjunction with the **Disclaimer**.

Quick Links							
Dose	Preparation & Administration	<u>Side Effects &</u> Interactions	Monitoring				
Restrictions							
Formulary: Unrestricted							
Description							

Electrolyte Supplement

Presentation

Oral mixture: 1mmol/mL (KEMH)

Oral mixture: 2mmol/mL (PCH)

Different Brands have different Concentrations – check carefully

Ampoule: 2g/10mL (20%) contains 3.4mmol sodium per mL (Pfizer®, AstraZeneca®)

Ampoule: 2.34g/10mL (23.4%) contains 4mmol sodium per mL (Phebra®)

Storage

Store at room temperature, below 25°C

Dose

Treatment of hyponatraemia

IV:

To calculate dose

Required mmol of sodium = weight (kg) x 0.6 x { 140 - infant's sodium level (mmol/L) }

Oral:

0.5 to 1mmol/ kg/ dose every 6 to 8 hourly

Adjust dose according to response

Maximum: 6mmol/ kg in 24 hours

Dose Adjustment

Renal Impairment:

No information

Hepatic Impairment:

No information

Preparation

IV Infusion:

Using Sodium Chloride 20% (Pfizer®/ AstraZeneca®)

Withdraw (required mmol of sodium divided by 3.4) mL.

Dilute to 25mL with appropriate diluent

Using Sodium Chloride 23% (Phebra®)

Withdraw (required mmol of sodium divided by 4) mL.

Dilute to 25mL with appropriate diluent

Administration

IV:

Run the infusion at the rate of 1mL per hour

Give via central line if available. If giving through UVC make sure the tip of the UVC is not in the heart or the liver.

<u>Oral:</u>

May be given at any time with regard to feeds.

Compatible Fluids

Glucose 5%, Glucose 10%

Y-Site Compatibility

Refer to KEMH Neonatal Medication Guideline: Y-Site IV Compatibility in Neonates

Side Effects

Common: hypernatraemia, gastric irritation (oral), extravasation (IV), venous thrombosis (IV)

Serious: rapid infusion can cause pulmonary oedema, respiratory arrest, renal failure, convulsions

Monitoring

Serum sodium, electrolytes

Comments

High risk of extravasation if administered undiluted.

Related Policies, Procedures & Guidelines

External Legislation, Standards and Policy (list and hyperlink)

Check if existing higher level documents to avoid content duplication- see DoH WA and National, NMHS policies, WNHS policies, ACSQHC, NSQHS, ACORN

HDWA Mandatory Policies:

Example

List and hyperlink the titles of useful resources, do not hyperlink MR forms

WNHS Clinical Practice Guidelines:

Example

WNHS Pharmaceutical and Medicines Management Guidelines:

References

Neomed Formularies. Sodium Chloride 20%. In: The Royal Hospital for Women [Internet]. [South Eastern Sydney, New South Wales;2021 [cited 2021 Nov 29]. Available from: https://www.seslhd.health.nsw.gov.au/royal-hospital-for-women/neomed-formularies

Neomed Formularies. Sodium Chloride 23%. In: The Royal Hospital for Women [Internet]. [South Eastern Sydney, New South Wales;2021 [cited 2021 Nov 29]. Available from: <u>https://www.seslhd.health.nsw.gov.au/royal-hospital-for-women/neomed-formularies</u> Society of Hospital Pharmacists of Australia. Sodium Chloride 20% and 23.4%. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2021 [cited 2021 Nov 29]. Available from: <u>http://aidh.hcn.com.au</u> MIMS Australia. Phebra Sodium Chloride 23.4%. In: MIMS Online [Internet]. St Leonards (New South Wales): MIMS Australia; 2021 [cited 2021 Nov 29]. Available from: <u>https://www.mimsonline.com.au</u>

Keywords	Sodium chloride 20%, Sodium Chloride 23.4%, Sodium Chloride concentrated, NaCl, sodium, hyponatraemia							
Document Owner:	Head of Department - Neonatology							
Author/ Reviewer	KEMH & PCH Pharmacy/Neonatology Directorate							
Version Info:	3.2							
Date First Issued:	Oct 2013	Last Reviewed:	29/11/20)21	Review Date:	29/11/2024		
Endorsed by:	Neonatal Directorate Management Group				Date:	29/11/2024		
NSQHS Standards Applicable:	Std 1: Clinical Governance			Std 5: Comprehensive Care				
	Std 2: Partnering with Consumers			Std 6: Communicating for Safety				
	Std 3: Preventing and Controlling Healthcare Associated Infection			Std 7: Blood Management				
	Std 4: Medication Safety		Std 8: Recognising and Responding to Acute Deterioration					
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