Hydrocortisone

BRAND NAME Solu-Cortef or generic

FORM Injection powder of Hydrocortisone 100mg (as sodium succinate)

INDICATION

1a. Treatment of Adrenal insufficiency in salt losing crisis.

2. Treatment of pressor- resistant hypotension in premature neonates.

3. Prevention of Chronic lung disease (from Premiloc study)

DOSE RANGE

1. Treatment of Adrenal insufficiency in salt losing crisis.

Note: this is a life threatening illness and management should be discussed with the Consultant Paediatrician on call.

AGE	DOSE	FREQUENCY	ROUTE
Neonate – 6 months	12.5mg Initial dose	Once only	Slow IV injection
	Followed by 0.5 - 1mg/hour as soon as I.V. access has been established.	Continuous infusion	IV

2. Treatment of pressor- resistant hypotension in neonates.

CONSULTANT PAEDIATRICIAN WILL AUTHORISE USE.

AGE	DOSE	FREQUENCY	ROUTE
Preterm	1 - 2.5mg/kg	2 - 4 times a day	Slow IV injection
Term - 6 months	1 - 2.5mg/kg	4 times daily for 24 hours initially	Slow IV injection

3. Prevention of Chronic Lung Disease(from Premiloc study)

Commence within 24 hours of birth. Not to be used if baby receiving ibuprofen or indomethacin

For babies born at < 28+0 weeks.	**DOSE**	**FREQUENCY**	**ROUTE**
Day 1-7	**0.5mg/kg**	**Every 12 hours**	**IV**
Day 8-10	**0.5mg/kg**	**Every 24 hours**	**IV**

PRESCRIPTION OF CONTINUOUS INFUSION

50mg in 50ml infusion fluid

This gives:-

- 1mg/hr at 1ml/hour

RECONSTITUTION

Reconstitute 100mg vial with 1ml water for injection
Resulting solution 100mg/ml

DILUTION

1. For continuous IV Infusion

Hydrocortisone Sodium Succinate 100mg/1ml inj.	0.5ml
Sodium Chloride 0.9% inj.	up to 50ml total

Gives a 1mg in 1ml solution. Use required volume.

2. For bolus IV injection

Hydrocortisone Sodium Succinate 100mg/1ml inj.	0.5ml
Sodium Chloride 0.9% inj.	up to 10ml total

Gives a 5mg in 1ml solution. Use required volume

3. For bolus IV injection for Premiloc indication

Hydrocortisone Sodium Succinate 100mg/1ml inj.	0.5ml
Sodium Chloride 0.9% inj.	up to 50ml total

Gives a 1mg in 1ml solution. Use required volume.

METHOD OF ADMINISTRATION

Slow IV injection : administer over 3 – 5 minutes.
IV continuous infusion: by infusion pump

COMPATIBILITY

Solution compatibility	sodium chloride 0.45%, sodium chloride 0.9%, Glucose 5%.
Solution incompatibility	No information
IV Line compatibility	No other drugs or fluids in same line at same time
IV Line incompatibility	All other drugs

THIS LIST IS NOT EXHAUSTIVE PLEASE CONTACT PHARMACY FOR FURTHER INFORMATION ON COMPATIBILITY WITH ANY MEDICINES NOT INCLUDED

CAUTIONS, CONTRA-INDICATIONS AND SIDE EFFECTS

- See Summary of Product Characteristics and most recent edition of BNF for Children (links below)

PH 7.0 - 8.5

SODIUM CONTENT 0.44mmol/ml

LICENSED STATUS Licensed for intravenous use in children.

LINKS BNF for Children: / Electronic Medicines Compendium

References:

Seri I, Evans J: Controversies in the diagnosis and management of hypotension in the newborn infant. Current Opinion in Pediatrics 2001, 13(2):116-123.

Seri I, Tan R, Evans J: Cardiovascular effects of hydrocortisone in preterm infants with pressor resistant hypotension. Paediatrics 2001,107:1070-1074.

Discussion with Dr Guftar Shaikh December 2018

Effect of early low-dose hydrocortisone on survival without bronchopulmonary dysplasia in extremely preterm infants(PREMILOC):

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)00202-6/fulltext

APPLICABLE POLICIES GGC Paediatric Guideline – Adrenal Insufficiency protocol for children

West of Scotland Neonatal Guidelines:

Consult local policy if applicable

Document Number:	005	Supersedes:	004
Prepared by:	WoS Neo Pharm Group	Checked by	Hazel Fisher
Date prepared	June 2016	Date updated	February 2021
Updated by	Anisa Patel	Review Date	February 2024

Administer reconstituted solutions immediately.
All vials, ampoules and infusion bags are for single use only unless otherwise stated.
Dose may vary depending on indication, age, renal function, hepatic function, and concomitant medications.
This monograph should be used in conjunction with the package insert, BNF for Children, and Summary of Product Characteristics. For further advice contact your clinical pharmacist or pharmacy department.