



NEONATAL MEDICATION GUIDELINE

Clonazepam

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](#).

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Requires Neurologist or Neonatologist approval before commencing

HIGH RISK Medication 

Description

Benzodiazepine

Presentation

Ampoule: 1mg/mL

Oral Drops: 2.5mg/mL (1 drop = 0.1mg = 100micrograms)

Storage

Store at room temperature, below 25°C

Schedule 4 Restricted Medication

Dose

Caution: Clonazepam IV contains benzyl alcohol

Intravenous administration of benzyl alcohol has been associated with serious adverse events and death in neonates characterized by central nervous system depression, metabolic acidosis, gasping respirations, cardio-vascular failure and haematological anomalies ("gasping syndrome").

Intravenous clonazepam should only be used if no therapeutic alternative is available

Anticonvulsant for status epilepticus and epilepsy unresponsive to conventional therapy

IV:

50 microgram to 100 microgram/**kg**/dose over 2 – 5 minutes

Repeat after 15 minutes if necessary

Maximum DAILY dose: 1mg

Oral:

Note: ORAL dose is independent of weight

100 microgram to 300 microgram per **day** in 2 – 3 divided doses

May be increased every third day by 250 – 500 microgram increments

Maximum DAILY dose: 3mg – 6mg

Dose Adjustment

Adjust dose according to response in consultation with neurology

Note: Clonazepam has a long half-life, repeated doses can cause accumulation

Preparation

IV

Do not use diluent provided – use a suitable diluent from compatible fluids for dilution

Withdraw 1mL (1mg) of clonazepam injection and make up to 10mL with a compatible fluid

Concentration = 1mg/10mL = **100 microgram/mL**

Oral

For doses less than 100micrograms

Take 0.1mL (250microgram) of oral clonazepam drops and dilute to 1mL with Water for Irrigation

Concentration = 250 microgram/mL = **25 microgram/0.1mL**

Administration

IV

Inject slowly over 2 to 5 minutes

Oral

May be given at any time with regards to feeds

Compatible Fluids

Glucose 5%, Glucose 10%, Sodium Chloride 0.9%

Y-Site Compatibility

Refer to KEMH Neonatal Medication Guideline: [Y-Site IV Compatibility in Neonates](#)

Side Effects

Common: sedation, tachycardia, oedema

Serious: CNS and respiratory depression, skin reaction

Monitoring

Cardiac and respiratory monitoring

Long term therapy may require therapeutic monitoring

Time to reach steady state: 1 week

Therapeutic range: 20 – 70 microgram/L

Sampling time: midway between doses

Comments

Oral drops are dyed blue

Clonazepam IV contains benzyl alcohol - intravenous administration of benzyl alcohol has been associated with serious adverse events and death in neonates characterized by central nervous system depression, metabolic acidosis, gasping respirations, cardio-vascular failure and haematological anomalies (“gasping syndrome”)









Intravenous clonazepam should only be used if no therapeutic alternative is available

Related Policies, Procedures & Guidelines**CAHS Clinical Practice Guidelines:**

[Medication Administration: Intramuscular, Subcutaneous, Intravascular Neonatal Seizures](#)

References

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