



GUIDELINE

Caffeine Administration

Scope (Staff):	All Emergency Department Clinicians
Scope (Area):	Emergency Department

This document should be read in conjunction with this DISCLAIMER
<http://kidshealthwa.com/about/disclaimer/>

Caffeine Administration

Medication

- **CAUTION: Caffeine Base 1mg = Caffeine Citrate 2mg**
- To minimise dosing errors, always prescribe as Caffeine Base or Caffeine Citrate
- Caffeine Base is the preparation used at PMH

Actions

- Stimulates central inspiratory drive
- Increases sensitivity of the medullary centre to CO₂

Indications

- Used for prevention or treatment of apnoea of prematurity or apnoeas associated with respiratory infection or anaesthesia
- To aid extubation of ventilated babies

Adverse

- Nausea, vomiting and gastric irritation
- Agitation
- Tachycardia
- Diuresis
- Overdose – arrhythmias, seizures

Dosage

Loading Dose:

- 20mg/kg (**Caffeine base**)
- Administer undiluted via syringe pump over 30 minutes
- May be diluted with 0.9% Saline or 5% Dextrose to make a convenient volume for infusion if required
- May be infused via peripheral IV or orally

Maintenance Dose:

- 5 – 7.5mg/kg/day (**Caffeine base**)
- Commence maintenance dose at least 24 hours after loading dose
- Administer via syringe pump over 10 minutes
- Maybe diluted with 0.9% Saline or 5% Dextrose to make a convenient volume for infusion if required
- May be infused by peripheral IV or given orally

Preparation

- Oral Solution: 10mg / mL (Oral dose to be given with feeds)
- Ampoule for IV Use: 50mg / 5mL (**Caffeine base**)

Special

- Routine monitoring of drug level is not required
- Check levels if toxicity is suspected or to check therapeutic range
- Therapeutic range: 5 – 30 mg/L
- Toxic range: >50 mg/L
- Sampling time: midway between doses
- Observe infants for symptoms of toxicity:
 - tachycardia
 - jitteriness
 - tremors
 - unexplained seizures
 - vomiting


Tags

apnoea, baby, caffeine, neonatal, neonate, prematurity, respiratory

References

PMH ED Guidelines: Caffeine Administration – Last Updated September 2014
 NCCU Clinical Guidelines, KEMH/PMH, Caffeine
 AMH Children's Dosing Companion (online). Adelaide: Australian Medicines Handbook Pty Ltd; 2014 July. Available from: <https://childrens.amh.net.au>
 Paediatric Dosage Handbook International 17th Edition (2011)
 EMIMS 2012
 Australian Injectable Drugs Handbook 5th Edition (2011)

This document can be made available in alternative formats on request for a person with a disability.

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