Caffeine Citrate

NOTE : Take special care with calculating doses and administration volumes. A ten times overdose could prove fatal.

Neonatal

FORM Ampoule containing 20mg in 1ml.

PRESCRIBE AS CAFFEINE CITRATE.

INDICATION

1) Treatment of apnoea of prematurity
2) Prevention of bronchopulmonary dysplasia

DOSE RANGE

AGE	DOSE	FREQUENCY	ROUTE
Neonate - 6 months	20mg/kg/dose	**LOADING DOSE**	IV
Neonate - 6 months	10mg/kg/dose	1 dose daily **MAINTENANCE ***	IV

- Maintenance dose commenced 24 hours after loading dose
- Some neonates may require 20mg/kg. This should be split into two doses.
- Neonates over 44 weeks postmenstrual age may require 10mg/kg twice daily.
- Neonates over 28 days of age who are still apnoeic should benefit from maintenance caffeine doses administered twice a day.
- If there is inadequate clinical response to the first loading dose (20mg/kg), a second dose (20mg/kg) may be given. **However the half life of caffeine citrate is such that a loading dose should not need *to be repeated within 5 days if a total of 40mg/kg has been administered.***
- Preterm neonates on phenobarbital should receive maintenance doses administered twice a day.
- Caffeine Citrate should ideally be stopped 7 days prior to planned discharge date

RECONSTITUTION Already in solution

DILUTION Further dilution not required, but may be diluted with sodium chloride 0.9% or glucose 5%.

METHOD OF ADMINISTRATION Slow IV injection over 3 – 5 minutes via a central line if possible

COMPATIBILITY

Solution compatibility	Glucose 5%, Sodium Chloride 0.9%,
Solution incompatibility	TPN
IV Line compatibility	Adrenaline, Cefotaxime, Dexamethasone, Dobutamine, Dopamine, Fentanyl, Gentamicin, Morphine, Phenobarbital, Sodium Bicarbonate Vancomycin
IV Line incompatibility	Aciclovir, Furosemide

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)

FURTHER INFORMATION

- Extravasation risk. Extravasation is likely to cause tissue damage as the pH is less than 5.
- Tachycardia is the first sign of toxicity. Seizures, circulatory collapse and death can occur with ten times the recommended dose.
- In neonates, the half life is more than 100 hours

PH 4.7

LICENSED STATUS Licensed product. Dose is outwith license but in line with NICE guidance, as is indication (2)

LINKS BNF for Children: / Electronic Medicines Compendium

APPLICABLE POLICIES West of Scotland Neonatal Guidelines:

Consult local policy if applicable

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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.