

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- Calcium chloride is **second-line** when the gluconate salt is unavailable ^(ref 1)
- Calcium chloride minijets MAY BE USED in the resus situation
- Very irritant solution- give slowly, and stop if extravasation occurs
- Calcium chloride should **NEVER** be given by IM or subcutaneous routes, as **severe necrosis and sloughing may occur**
- Do NOT administer through same line as solutions containing phosphate, bicarbonate or sulphates
- Do NOT CONFUSE WITH CALCIUM GLUCONATE
- There is a risk of **arrhythmias** if the drug is given too quickly. Also, nausea, vomiting, hot flushes, sweating, hypotension, tingling, chalky taste and vasomotor collapse may occur if the drug is given too quickly ^(ref 2)

Available preparations

Drug	Presentation	Concentration (mmol)	Concentration (%= g/100ml)	Content in grams
Calcium chloride	minijet	6.8 mmol in 10ml	10%	1g in 10ml
	ampoule	5mmol in 5ml	14.7%	0.735g in 5ml
	ampoule	10mmol in 10ml	14.7%	1.47g in 10ml

Reconstitution

Already in solution

Draw up using a 5 micron filter needle (ampoules)

Infusion fluids

Sodium chloride 0.9% $^{(ref 2)}$

Methods of intravenous administration

Slow intravenous injection (in resus situations)

- Minijet: as per resuscitation guidelines
- Ampoules: administer slowly over at least 3 minutes (ref 2)
- See under 'Important information' re rate of administration

Intermittent intravenous infusion(administer using an electronically controlled infusion pump)

- Dilute with at least four times its own volume with infusion fluid (ref 2)
- Administer over one hour via a large vein (ref 1)

• Rate may be increased if necessary to a maximum rate of 1mmol per minute (ref 2)

Dose in adults

Emergency situations

• As per resus guidelines

Hypocalcaemia

- Calcium gluconate salt preferred see separate monograph
- The dose is determined by the requirements of the patient
- Suggest initial dose of Calcium chloride 10mmol (10ml of **ampoule** solution)
- Repeat every day if needed

Hypocalcaemic tetany/severe hypocalcaemia

• See calcium gluconate monograph

Monitoring

- Monitor serum calcium, blood pressure
- The infusion site must be monitored to ensure extravasation injury has not occurred
- There is a risk of arrythmias if the drug is given too quickly (ref 2)

Further information

- Conversion: 1mmol is the same as 2mEq
- Calcium chloride 1g = 270mg elemental calcium = $13.6mEq = 6.8mmol^{(ref 3)}$

Storage

Store at room temperature

References

SPC Minijet May 2019

- 1. Uptodate- accessed online 09/05/2023
- 2. Injectable medicines administration Medusa downloaded 29/03/2023
- 3: Druginformation.com Conversion calculator

Therapeutic classification

Electrolyte