Suxamethonium for neonates

BRIEF ADMINISTRATION GUIDE

For detailed information refer to The Australasian Neonatal Medicines Formulary **suxamethonium** guideline

Note: Shaded text indicates where Te Whatu Ora Waikato practice differs from ANMF

1. Medicine

1.1. Indications

Paralysis to facilitate intubation

1.2. Route and Presentation

Intravenous or intramuscular

Note: Onset of paralysis after IV administration is 30-60 seconds with duration of action of 4-6 minutes. Onset of action after IM administration is 2-4 minutes with duration of action of 19-23 minutes

- Supplied as suxamethonium chloride 100 mg/2 mL ampoule
  - pH 3-5

1.3. Dose

Direct IV Injection

- 2 mg/kg/dose (range 1-3 mg/kg)

IM Injection

- 2 - 4 mg/kg

Dose may be repeated if intubation unsuccessful and effects have diminished

2. Preparation and Administration

2.1. Compatible fluids

Glucose 5%, glucose 10%, sodium chloride 0.9%, sodium chloride in glucose solutions

2.2. Administration Method

Direct IV Injection

- Draw up 2 mL of suxamethonium and add 8 mL of sodium chloride 0.9% (or other compatible fluid) to make a final concentration of 100mg/10mL = **10 mg/mL**
- Draw up the required volume for the dose
- Administer by **slow IV injection** over 10-30 seconds
- Rapid administration may result in severe bradycardia or asystole. Precede with atropine to avoid bradycardia.
- Flush the line after each dose to avoid re-paralysis during recovery

IM Injection

- Administer undiluted by deep intramuscular injection
- Use only **when IV access is not available**

2.3. Monitoring

- Monitor heart rate, blood pressure, oxygen saturation, temperature, serum potassium, and peripheral nerve stimulator measuring twitch response
- Closely monitor ECG for peaked T-waves, an early sign of potential cardiac arrest secondary to acute rhabdomyolysis with hyperkalaemia
- Monitor for signs of adverse reactions
- Have supportive therapy: resuscitation equipment, oxygen and mechanical ventilation on hand

2.4. Storage and Stability

- Store ampoules in the refrigerator (2 to 8°C)
- Discard any remaining solution from the ampoule

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2.5. Competency for Administration

This procedure is carried out by or under supervision of medical staff, nurse practitioners or clinical nurse specialists. Nurse practitioners and clinical nurse specialists must hold current Te Whatu Ora Waikato Generic/IV Medicine Management and Neonatal unit specific certifications (NIC 2) skills verification.

2.6. Guardrails

N/a

3. References

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