# Suxamethonium intravenous for adults

## Who can administer

Administration restricted- see Appendix 1

## Important information

- Suxamethonium should be administered only by or under close supervision of an **experienced clinician (anaesthetist, intensivist, emergency physician)**
- It is given intravenously after anaesthesia has been induced and should not be administered to the conscious patient
- Anaphylactic reactions have been documented as has cross-reactivity with other neuromuscular blocking agents

## Available preparations

Murexal 100mg/10mL solution for injection in pre-filled syringe

Suxamethonium 100mg per 2ml ampouleÂ

## Reconstitution

**Pre-filled syringe**

- Already in solution

**Ampoules**

- **Draw up using a 5micron filter needle**

## Infusion fluids

Glucose 5% or Sodium chloride 0.9%

## Methods of intravenous administration

**Bolus intravenous injection** (pre-filled syringe is preferable)

- The medicinal product should not be used if the tamper evident seal on the syringe is broken.
- The external surface of the syringe is sterile until the blister is opened. The blister must not be opened until use
- When handled using an aseptic method, this medicinal product can be placed on a sterile field once it has been removed fromÂ the blister
- Administer required dose as a bolus intravenous injection

**Continuous intravenous infusion (ampoules only)**

- Dilute to a concentration of either 1mg/ml or 2mg/ml (i.e. one ampoule of 100mg in 50 or 100ml infusion fluid)

# Dose in adults

**Usual dose to achieve endotracheal intubationÂ**

- Give 1 mg/kg body weight as a single doseÂ
- This dose will usually produce muscular relaxation in about 30 to 60 seconds and has a duration of action of about 2 to 6 minutes
- Larger doses will produce more prolonged muscular relaxation, but doubling the dose does not necessarily double the duration of relaxation
- See also Further information
- Supplementary doses of 50 to 100% of the initial dose may be administered for the maintenance of muscle relaxation during short surgical procedures performed under general anaesthesia, at intervals of 5-10 minutes as requiredÂ
- During administration by repeated intravenous injections: total dose should not exceed 500mg/hour

**Intravenous infusion (ampoules only)**

- Give at a rate ofÂ 2.5 to 4mg per minute
- The infusion rate thereafter should be adjusted according to response
- The total dose should not exceed 500mg/hour

**Elderly**

- Dose requirements of suxamethonium in elderly are comparable to those for younger adults

**Renal impairment**

- A single dose of suxamethonium may be administered to patients with renal insufficiency in the absence of hyperkalaemia
- Multiple or larger doses may cause clinically significant rises in serum potassium and should not be used.

**Hepatic impairment**

- No dose adjustment is required in patients with hepatic impairmentÂ Â
- Although plasma cholinesterase levels often fall in patients with liver disease, levels are seldom low enough to significantly prolong suxamethonium-induced apnoea

# Further information

- The use of small doses of non-depolarising muscle relaxants given minutes before suxamethonium administration has been advocated for the reduction of incidence and severity of suxamethonium-associated muscle pains.
- This technique may require the use of doses of suxamethonium chloride in excess of 1 mg/kg to achieve satisfactory conditions for endotracheal intubationÂ

# Storage

**Murexal syringe**

- Store in a refrigerator (2-8$^{0}$C)
- Do not freeze
- Keep the pre-filled syringe in its unopened blister until use
- Once removed from the refrigerator, the syringe may be stored at room temperature (not exceeding 25$^{0}$C) for up to 30 days (however, it must be kept it its unopened blister)

- Once taken out of the refrigerator- the syringe packaging must be marked with the date of removal from the fridge

**Suxamethonium ampoules**

- Store in a refrigerator (2 - 8$^{0}$C)
- Do not freeze

## References

SPC: (Mercury) September 2022

SPC: (Murexal) November 2023

## Therapeutic classification

Ultra-short acting depolarising, neuromuscular blocking agent