

PANCURONIUM

ACTION and USES

Pancuronium is used as a muscle relaxant in neonates requiring assisted ventilation who are restless, hypoxic or not synchronizing with the ventilator. It appears to reduce lung barotrauma, risk of pneumothorax and prolonged oxygen dependency.

DOSAGE

100 microgram/kg/dose and then 50 microgram/kg/dose and adjust dose and frequency according to response. May be required every hour but usually every 4 -6 hours. After prolonged use (> 1 week) it may be appropriate to use half the usual dose or less. Consider increasing dose stepwise up to 200 micrograms/kg if duration of action is less than 1 hour.

ADMINISTRATION

By IV bolus over 1 minute.

RECONSTITUTION

Pancuronium Injection is available as a solution containing 2mg/ml in a 2ml ampoule. Reconstitution is not required but dilution is necessary if the dose cannot be measured accurately (ie. less than 0.1ml). A suitable dilution is 500 microgram/ml in sodium chloride injection 0.9%.

Pancuronium diluted solution 500 microgram/ml

Mix 0.5ml of pancuronium injection 2mg/ml with 1.5ml of sodium chloride injection 0.9% and shake well to mix.

INCOMPATIBILITIES

Sodium bicarbonate, phenobarbital and diazepam.

STORAGE

Opened ampoules or diluted solutions, should be used immediately, do not store Unopened ampoules are stored in the refrigerator.

MONITORING

Monitor heart rate, blood pressure, respiratory function and temperature. Moderate oedema is common, strict attention to fluid requirements is needed (risk of fluid retention). The duration of muscle relaxation may be increased in renal failure. In hepatic and biliary disease there may be resistance to paralysis. Electrolyte imbalance (hypokalaemia, hypocalcaemia, hypermagnesaemia) and acidosis can enhance the degree of paralysis. Gentamicin, and phenytoin can increase its effects. Muscle relaxation can mask any seizure activity. Hypromellose eye drops should be prescribed to lubricate eyes. Localised reaction can occur, observe IV site for rash and phlebitis.