N-acetylcysteine (NAC)



NAC is a sulfhydryl donor used to treat paracetamol toxicity and less commonly, other hepatoxic poisonings

Toxicological indications: See separate guidelines for paracetamol / amanita / paraquat poisonings.

Dose and Administration (2 infusion regimen)

Adults:

INFUSION 1: 200 mg/kg NAC in 500 mL 5% dextrose or 0.9 % sodium chloride over 4 hours

INFUSION 2: 100 mg/kg NAC in 1000 mL 5% dextrose or 0.9 % sodium chloride over 16 hours

Children ≤ 14 years old:

INFUSION 1: 200 mg/kg in 7mL/kg (up to 500 mL) of 5% dextrose or 0.9% sodium chloride over 4 hours

INFUSION 2: 100 mg/kg in 14 mL/kg (up to 1000 mL) of 5% dextrose or 0.9% sodium chloride over 16 hours

Contra-indications: Previous severe anaphylactoid reaction is a relative contra-indication (discuss with clinical toxicologist)

Pregnancy: NAC should be administered to pregnant patients if indicated

Adverse effects: (Cease infusion if reaction is severe and discuss with clinical toxicologist)

- Anaphylactoid reactions (incidence 10-47%) usually mild, but may be severe mild hypotension / flushing / rash / angioedema/ bronchospasm
- Usually occur in association with Infusion 1. Cease infusion. Treat along conventional lines.
- When symptoms resettle, start at ½ rate and slowly increase to full rate over 30minutes.