

This information is for ORAL overdose only
For IV overdose consult Toxbase

HEPATIC ENCEPHALOPATHY can be rapidly progressive.
Any concerns discuss with SENIOR

DRUG PROPERTIES

- Toxic doses may cause Hepatocellular necrosis
 - Maximal damage is 3-4 days post overdose
- Nausea and Vomiting are early symptoms:
 - Normally settle within 24 hours
 - On-going symptoms +/- Right upper Quadrant pain suggest Hepatic necrosis

TOXIC DOSE

Dose > 75mg/kg within 24 hours

Use Actual Body Weight

- Unless patient > 110kg - then use 110kg as body weight

INVESTIGATIONS

Bloods:

- FBC / U&E / LFT / CRP
- INR
- Plasma-Paracetamol level
- ABG (Lactate)
- Salicylate level
- CK

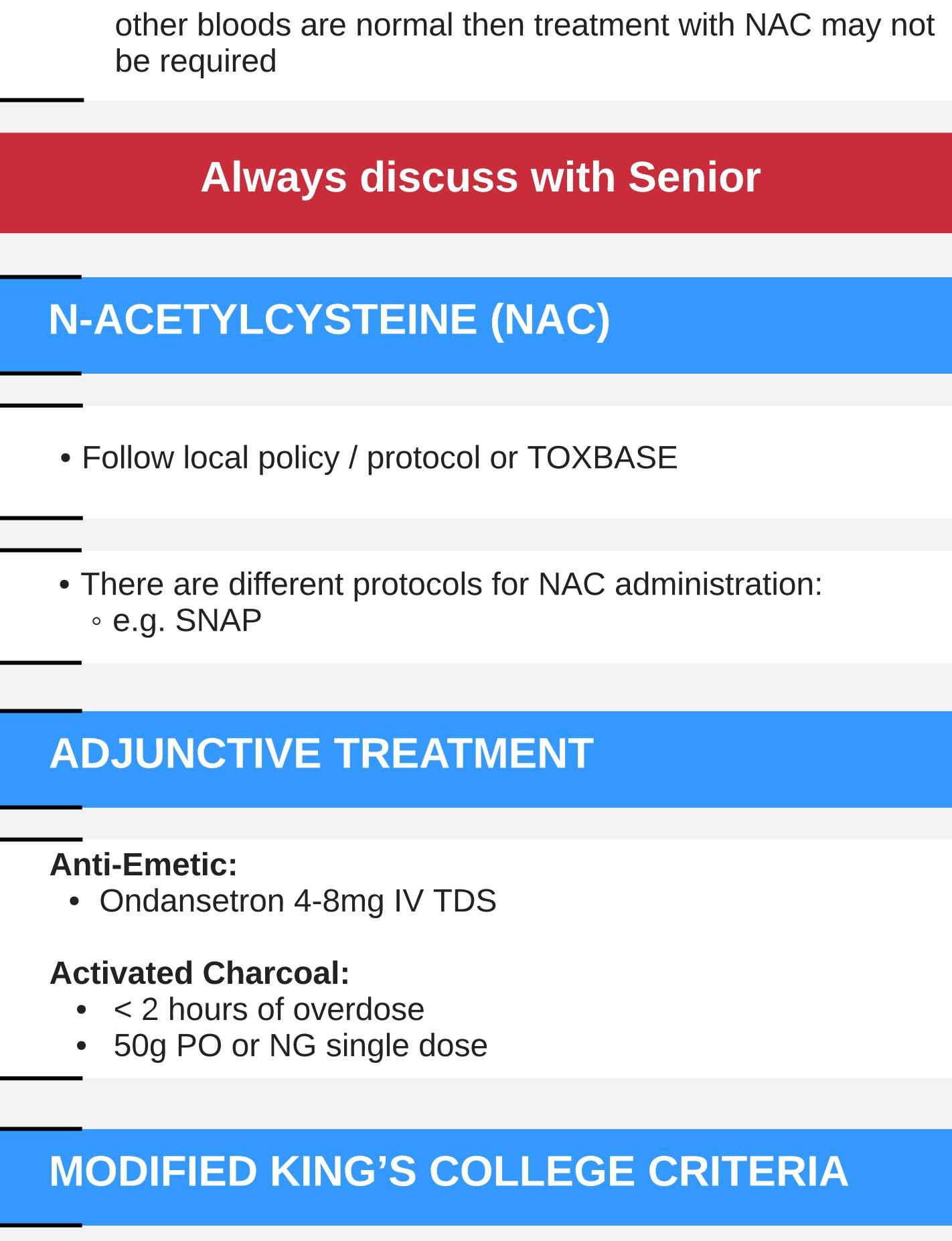
Urine:

- Drug screen

ACUTE OVERDOSE NOMOGRAM

Not suitable to use for:

- Overdose < 4 hours ago
- Staggered overdose (dose taken over > 1 hour)
- Uncertain time of overdose
- Therapeutic excess
- History of alcohol, use of enzyme inducers, malnourished
 - Seek specialist help**



Patient at risk of Liver Damage:

- Plasma-Paracetamol concentration falls **On or Above** the Treatment line

N-ACETYLCYSTEINE (NAC) INDICATIONS

START NAC TREATMENT IMMEDIATELY

Acute overdose:

- Present < 8 hours post overdose
 - Plasma-Paracetamol concentration **On or Above** the Treatment line

- Present 8 - 24 hours post overdose
 - Taken > 150mg/kg
 - Don't wait for Plasma-Paracetamol concentration
 - Can stop treatment if level comes in below Treatment line

Staggered overdose:

- Commence in all patients irrespective of dose and timescale

Uncertainty:

- Uncertain dose taken / timing / clinical features

If one episode of ingestion < 150mg/kg within 24 hours:

- If asymptomatic of hepatic injury await blood tests of Plasma-Paracetamol concentration, LFT, INR, CRP before starting NAC
- If Plasma-Paracetamol concentration undetectable and all other bloods are normal then treatment with NAC may not be required

Always discuss with Senior

N-ACETYLCYSTEINE (NAC)

- Follow local policy / protocol or TOXBANE

- There are different protocols for NAC administration:
 - e.g. SNAP

ADJUNCTIVE TREATMENT

Anti-Emetic:

- Ondansetron 4-8mg IV TDS

Activated Charcoal:

- < 2 hours of overdose
 - 50g PO or NG single dose

MODIFIED KING'S COLLEGE CRITERIA

Criteria for when to transfer patient to Regional Liver Centre for consideration of transplantation

ABG pH < 7.3

- At any time

ABG Lactate > 3.5mmol/L

- post 4 hour resuscitation

ABG Lactate > 3.0mmol/L

- post 12 hour resuscitation

All 3 in 24 hour period:

- INR > 6.5
- Creatinine > 300mmol/L
- Grade 3 or 4 Encephalopathy*

Encephalopathy*:

- Grade 3:**
 - Marked confusion, incoherent speech, sleeping most of the time but arousable to vocal stimuli
- Grade 4:**
 - Comatose, unresponsive to pain, decorticate or decerebrate posturing

Always consult BNF and Toxbase for dose / administration and contraindications for all above medications

Any Criteria Met

CONTACT SENIOR