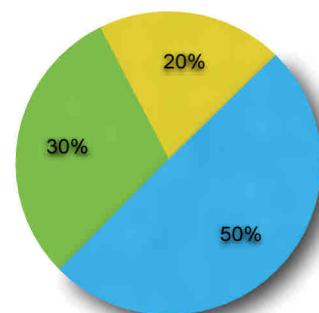


Paracetamol Overdose History

History: This patient has taken an overdose of paracetamol.

Task: Take a history, determine this patients suicide risk and briefly discuss your management plan.



● history ● communication ● clinical

Marking criteria	Not Completed	Partially Completed	Completed
Washes hands, Introduction, Confirms identity of patient			
Establishes rapport			
Asks about events leading up to the suicide attempt			
Determines what has been ingested			
Determines amount/timing/and if staggered			
Asks about past medical history including Liver disease, malnutrition/anorexia, alcoholism, cystic fibrosis and AIDS			
Asks about drug history including enzyme inducing drugs (PCBRAS): phenytoin, carbamazepine, barbiturates, rifampacin, alcohol, St. Johns wart			
Assess patient suicide risk			
Uses SAD PERSON score Sex male (1) Age<19->45 (1) Depression or hopelessness (2) Previous suicide or psychiatric care (1) Excessive alcohol or drug use (1) Rational thinking loss (2) Separated, widowed or divorced (1) Organized or serious attempt (2) No social support (1) Stated future intent (2)			
Interpretation of sad persons score <8 discharge after medically fit and psych consult >8 likely to require hospital admission			
Shows compassion			
Uses open ended questions were appropriate			
Explains to patient need for bloods/treatment (charcoal/NAC) and psychiatric review			
Avoids medical jargon, invites questions, thanks patient			
Overall			

Paracetamol Overdose History

Level 1 Understanding (basic sciences)

Describe the mechanism of paracetamol toxicity:

Paracetamol (Acetomenaphine) is metabolized by multiple liver enzymes.

Liver toxicity is secondary to overwhelming levels of NAPQI, a metabolite of paracetamol produced by cytochrome P450. This metabolite depletes glutathione stores which can result in liver failure. N-acetyl-cysteine is the central molecule of glutathione.

Level 2 Understanding (applied sciences)

Draw the Rumack-Matthew nomogram:

What are the dose calculations for Parvolex (NAC):

150mg/kg in 200ml 5% Dex over 15min

50mg/kg in 500ml 5% Dex over 4 hours

100mg/kg in 1000ml 5% Dex over 16 hrs

Describe your management plan during the following intervals:

<4hrs: Charcoal (<1hr), 4hr bloods levels

4-8hrs: levels, start NAC if bloods not available

at 8hrs & >150mg/kg ingested

>8hrs: start NAC if ingestion is >150mg/kg or 12g

Level 3 Understanding

(advanced sciences/management)

What other antidote is available in paracetamol overdose, when and how is it given?

Methionine may be given to late presenters >12 hours (2-5g every 4hrs to 10g total) not effective post charcoal

In serious untreated overdoses

What symptoms would you expect to see over the next 5 days?

Pain and tenderness over liver >24 hrs, Hypoglycaemia 1-3 days

Jaundice 2-4 days

Hepatic encephalopathy 3-5 days

What are the criteria for referral to the liver unit:

pH <7.3 post resuscitation, PT >100 sec, (INR>6.7), creatinine >300micromole/l with grade 3 or 4 hepatic encephalopathy

