Paracetamol overdose presenting >24hrs
(Ingested total overdose in ≤1 hour time period)

Assess for clinical features of *bedside hepatic toxicity and START acetylcysteine (NAC) if present

Take baseline bloods (U&Es, HCO3, LFTs, FBC, INR, glucose, paracetamol level).

Assess for hepatotoxicity (ANY*)
1. Paracetamol level >5mg/L or
2. ALT >50** or
3. INR >1.3**

If features of hepatotoxicity then START/continue NAC
If no features of hepatotoxicity then NAC not required

Psychiatry review, see GGC Adult Therapeutics Handbook for local pathway. Referral to be sent by admitting doctor including estimated time to completion of infusion.

Take bloods 2hrs before the end of infusion 2: take U&Es, HCO3, LFTs, FBC, INR, glucose and paracetamol level.

Discontinue NAC after infusion 2 if: INR ≤1.3 AND ALT <100 AND ALT <2x admission value AND paracetamol level <20

If criteria for discontinuing not met then proceed to infusion 3

Discontinue NAC after infusion 3 if: INR ≤1.3 AND ALT <100 AND ALT <2x admission value.
(Bloods should be checked 2 hours before the end of infusion 3).

Psychiatry review

If criteria for discontinuing not met then proceed to infusion 4 (and repeat if needed) until: INR ≤1.3, or INR falling on two consecutive bloods AND INR <3.0
(Bloods should be checked 2 hours before the end of infusion 4).

*Clinical judgement required
• Bedside hepatic toxicity: Jaundice, tender liver, hypoglycaemia, encephalopathy, unexplained lactic acidosis.
• Ensure no doubt about time of ingestion or type.
• If uncertainty then treat and review with bloods.

**Clinical judgement required
• Some patients have a chronically raised ALT/INR.
• Review old LFTs/INRs and if chronic derangement discuss with a senior clinician before proceeding to NAC.

Blood monitoring
• Checking a paracetamol level 2hrs before the end of bag 2 is NEW for this protocol.
• U&E, HCO3, glu, LFTs, FBC and INR should be done 2hrs before the end of each infusion 2. Ensure results are READY for the end of the infusion.
• If unable to achieve blood sampling at the correct time and a delay of >90 minutes is predicted then proceed to the next infusion to avoid prolonged omission of NAC. Bloods should be checked at the earliest opportunity and discontinuation criteria referred to.
• Capillary Blood Glucose (CBG) 6 hourly while on NAC
• If rapid or progressive biochemical deterioration then discuss with senior and consider referral to regional transplant centre.
• IV NAC can be associated with minor rise in INR without an acute liver injury.

*** Bloods should be done 2 hours before the end of infusion 3 and 4.