

Paracetamol (APAP) – Acute Single Ingestion of Immediate-Release Preparation

This guideline covers the management of immediate-release paracetamol (APAP) taken in overdose in a single ingestion (over <120 minutes)

Risk Assessment	TIME POST INGESTION	MANAGEMENT: [APAP]= paracetamol concentration AC = activated charcoal																							
<p>Risk of acute liver injury if >200 mg/kg OR >10 g ingested</p>	0-2 hours	<ul style="list-style-type: none"> - Co-operative patients: AC if > 200 mg/kg or 10 g (whichever is less) has been ingested within a 120-minute period OR > 30 g has been ingested within a 4-hour period - Plot [APAP] at 4 hours post ingestion. If [APAP] above treatment line, treat with 20-hour NAC course (see NAC guideline) 																							
<p>Clinical features:</p> <ul style="list-style-type: none"> - Usually asymptomatic - Abdominal pain, vomiting - Late toxicity – liver failure, coagulopathy, encephalopathy 	2-4 hours	<ul style="list-style-type: none"> - Plot [APAP] at 4 hours post ingestion. If [APAP] above treatment line, treat with 20-hour NAC course (see NAC guideline) 																							
<p>Antidote:</p> <p>N-acetylcysteine (NAC)</p> <p>Dosing: see NAC guideline</p>	4- 8 hours	<ul style="list-style-type: none"> - If [APAP] WILL NOT BE available <8 hours of ingestion, start NAC (if ingested dose >200mg/kg or >10 g, or unknown) - Discontinue NAC if [APAP] below treatment line, otherwise complete 20-hour NAC course (see NAC guideline) - If [APAP] IS AVAILABLE WITHIN 8 hours, and is above treatment line: treat with 20-hour NAC course (see NAC guideline) 																							
<p>Massive APAP Exposures</p> <ul style="list-style-type: none"> -double the dose of NAC in the second NAC infusion if the APAP concentration is > 2x the nomogram -reported dose APAP > 50g or >0.5g/kg - discuss with clinical toxicologist 	8-24 hours	<ul style="list-style-type: none"> - Start NAC and obtain [APAP]. Continue 20-hour NAC course if [APAP] above treatment line or ALT > 50 IU/L 																							
	> 24 hours	<ul style="list-style-type: none"> - Start NAC and obtain [APAP] and ALT. Continue 20-hour NAC course if [APAP] detectable or ALT > 50 IU/L 																							
<div data-bbox="495 724 1630 1390"> <table border="1"> <caption>Approximate data points from the nomogram</caption> <thead> <tr> <th>Hours Post Ingestion</th> <th>Serum Paracetamol Concentration (mg/L)</th> </tr> </thead> <tbody> <tr><td>4</td><td>150</td></tr> <tr><td>6</td><td>100</td></tr> <tr><td>8</td><td>75</td></tr> <tr><td>10</td><td>55</td></tr> <tr><td>12</td><td>40</td></tr> <tr><td>14</td><td>30</td></tr> <tr><td>16</td><td>22</td></tr> <tr><td>18</td><td>16</td></tr> <tr><td>20</td><td>12</td></tr> <tr><td>22</td><td>9</td></tr> <tr><td>24</td><td>7</td></tr> </tbody> </table> </div>	Hours Post Ingestion	Serum Paracetamol Concentration (mg/L)	4	150	6	100	8	75	10	55	12	40	14	30	16	22	18	16	20	12	22	9	24	7	<p>2-HOURS PRIOR TO COMPLETION OF 20-HOUR NAC COURSE:</p> <ul style="list-style-type: none"> - Measure ALT - Measure APAP concentration - If ALT is abnormal OR if APAP conc. is > 10 mg/L (>66 umol/L) continue NAC (see <i>Extended NAC Treatment Guideline</i>) + check INR and discuss with a clinical toxicologist
Hours Post Ingestion	Serum Paracetamol Concentration (mg/L)																								
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