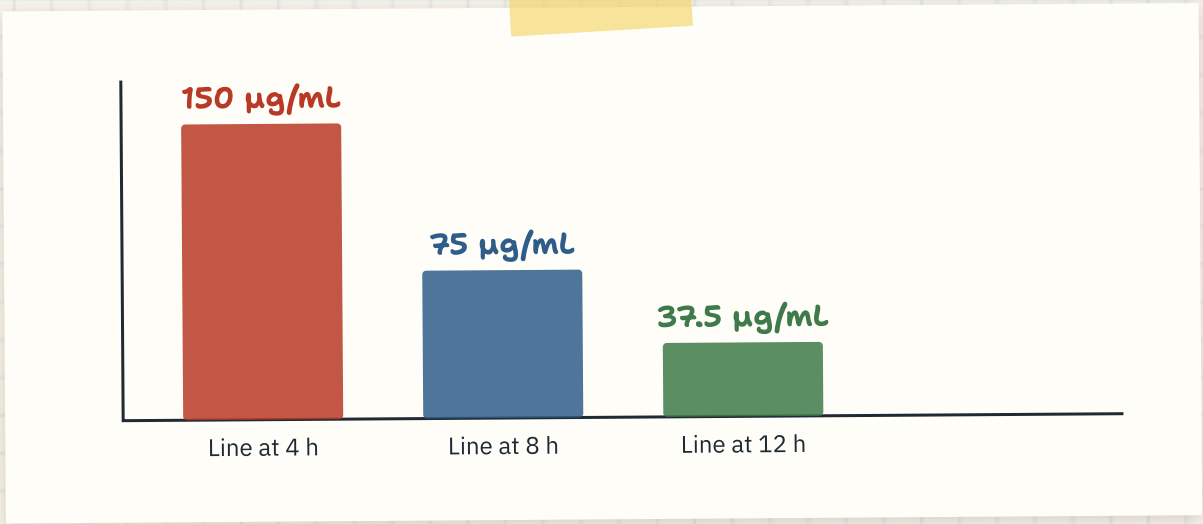
Acetaminophen overdose: level, clock, antidote

Decide on N-acetylcysteine with the nomogram



Step by step

1. Know the time of a single acute ingestion
2. Draw a level at 4 h or later
3. Plot it against hours since ingestion
4. Above the line: N-acetylcysteine

US TREATMENT LINE

150 µg/mL at 4 h, halves every 4 h

75 at 8 h; 37.5 at 12 h; level drawn at 4 h or later

Situation	Action
Single acute ingestion, known time, level above the line	N-acetylcysteine
Single acute ingestion, known time, level below the line	No N-acetylcysteine
Time unknown, staggered or repeated	Treat while checking liver tests

Which situation, which action

Rule of thumb

Glutathione gone, NAPQI builds up

NAC refills the glutathione supply

The level and the clock, not symptoms

Exam traps

- Normal liver tests early mean nothing: the damage is delayed.
- A level drawn before 4 hours may still be rising.
- The nomogram does not apply if the time is unknown or doses were staggered or repeated.

Acetaminophen overdose: the nomogram, NAPQI and NAC

Video, written lesson, practice question and sources: medservatory.com/usmle-step-2-ck/emergency-acute-care/acetaminophen-overdose-nomogram-nac

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