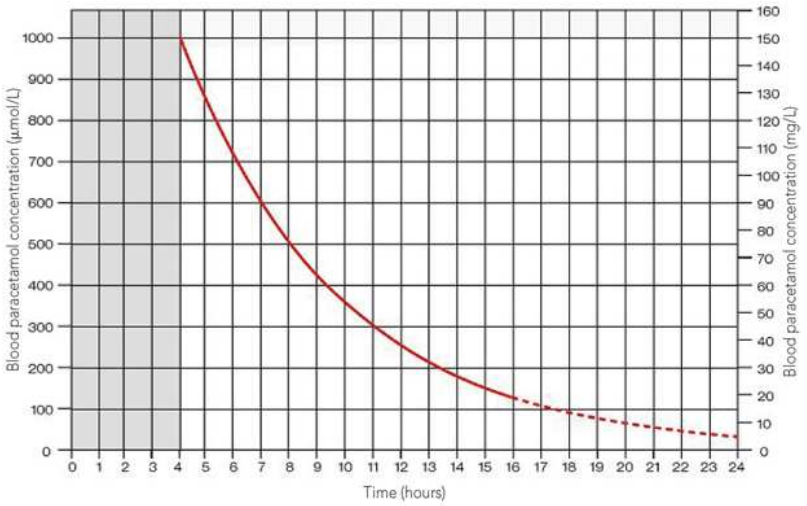
VAQ 2009.1.5 (Paeds)

A previously well 2 year old boy is brought to your emergency department by his mother after he ingested 1.8g of liquid Paracetamol at 0700 hours. Serum biochemical investigations were performed four hours after the ingestion; it is now 1200 hours. He is asymptomatic with normal vital signs.

			Normal range
Paracetamol	30	mg/L	
Alanine aminotransferase (ALT)	10	U/L	< 24



a. Discuss the utility of the nomogram shown in this patient (50%)
b. Outline your disposition (50%)

The paracetamol nomogram shown has been demonstrated to be safe and reliable in the context of single ingestions of immediate-release paracetamol. Serum levels greater than the 'line of safety' require treatment with N-acetylcysteine to prevent potential liver injury. This child is well under the treatment line and needs no further medical treatment. Other issues which will need to be addressed are those of potential neglect (not likely) and opportunistic education to prevent re-occurrence.

Nomogram
- **for paracetamol overdose in the context of:**
  - **single ingestions**
  - **known time**
  - **immediate release preparations**
  - **guides use of NAC to prevent liver damage**

Limitations
- can't be used for
  - staggered overdose
  - unknown time
  - sustained release preparations
  - repeated supratherapeutic use

Line extrapolated beyond 16h although generally thought to be appropriate

Overdoses presenting beyond 8h are treated with a different algorithm
- including initial presumptive administration of NAC and use of ALT

Safety
- well established to be **safe**
- revision to use single 'high risk' line has enhanced safety from previous nomogram

Disposition
- **No treatment is necessary for this patient**

Discharge
- Consideration given to potential neglect issues
- Opportunistic education regarding medication / toxin safety in children