



Safety Alert: Phenytoin Toxicity



A clinical incident occurred where a child in status epilepticus was given 22mls of neat phenytoin instead of 4.4mls of phenytoin DILUTED to 22mls total volume; resulting in cardiac arrest. After telephone contact with Toxbase (NPIS), intralipid TM was used as an antidote with a favourable outcome.

Learning for ED

- **Significant potential for error** in emergency situations in which drugs requiring calculation/dilution are required
- **Phenytoin can cause cardiac arrhythmias** and arrest if given as a rapid infusion and requires cardiac monitoring and infusion rates should not exceed 50mg/minute.
- **Intralipid TM** should be considered as an antidote to phenytoin toxicity in consultation with poisons centres
- Prior knowledge of the whereabouts and use of intralipid TM is vital
- **SIMULATION training** is a useful tool for improving team dynamics/knowledge to prevent delay in management of life threatening emergencies