



Toxicology – Anticonvulsants, Lithium

Pre-reading:

- Toxicology Handbook. 2nd ed.

1. A 21 yo female presents 3 hours following ingestion of “a whole box” of sodium valproate EC 500mg tablets. Her GCS is 14. Vital signs normal.
 - a. Describe the clinical features of sodium valproate overdose.
 - b. Describe your initial management.
 - c. Her GCS drops to 10 and her serum valproate concentration is 9,000 micromol/L. Describe your management.

2. A 46 yo female presents following ingestion of 18 x 200mg carbamazepine tablets.
 - a. Describe the clinical features of carbamazepine overdose
 - b. What are the features of anti-cholinergic syndrome and how do you treat it?
 - c. Multiple-dose activated charcoal is indicated in intubated patients following large carbamazepine OD. What is the rationale for MDAC?

3. A 34 yo male with a history of bipolar disorder is referred to the ED by his psychiatrist with a serum lithium concentration of 1.6 mmol/L. He has recently been taking indocid for back pain.
 - a. Describe the clinical features of chronic lithium toxicity.
 - b. How does this compare with acute lithium overdose?
 - c. List the common precipitants of chronic lithium toxicity
 - d. Describe your management.