TOXICOLOGY

SEDATIVE POISONING

Mental Status

- CNS Depression
- Confusion
- Coma

Vital Signs

- Hypothermia
- Bradycardia
- Hypotension
- Apnoea/bradypnoea

Other Manifestations

- Variable pupils
- Hyporeflexia

Examples of toxic agents

- Benzodiazepines
- Barbituates
- Alcohol
- Gamma-hydroxybutyrate
- Imidazopyridine (zolpidem)

Pathophysiology

- Most sedatives increase the activity of GABA, the principle inhibitory neurotransmitter in the CNS.
- Many agents also interact with other neurotransmitter systems eg glutamate (suppression), dopamine and serotonin.

Treatment

- ABC and supportive management.
- If there is respiratory depression consider endotracheal intubation.
- In unconscious patients consider the possibility of serious head injury.
- Alcohol – consider the need for treatment of Wernicke's encephalopathy.
- Benzodiazepines – flumazenil is an antidote for benzodiazepine toxicity. It can induce seizures in those with benzodiazepine tolerance, epilepsy or coingestion of pro-convulsant substances. Its use is limited to those with respiratory depression to avoid intubation. Always discuss with a senior prior to use.
- Barbituates – charcoal haemoperfusion or haemodialysis can be considered in life-threatening poisoning.