BARBITURATES TOXICITY

Practical Clinical Toxicology

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- **Barbiturates** are drugs that act as central nervous system depressants

- They have addiction potential, both physical and psychological.

- When barbiturates are taken during pregnancy, the drug passes through the mother's bloodstream to her fetus.

BARBITURATE TOXICITY

- **Cardiovascular :** at the highest doses cause blockade of sympathetic ganglia triggers hypotension , bradycardia, decrease in contractility and cardiac output, inhibition of medullary vasomotor centers induce vasodilatation.

- **Dermal:** barbiturate blisters, as lesions on fingers, buttocks and near the knees.

DIAGNOSIS

- Drug screens, both urine and serum, can detect barbiturates for up to 5 days after ingestion.
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BASIC MANAGEMENT

- Treatment of the patient with barbiturate toxicity is predominantly supportive.

SUPPORTIVE CARE

- Assess the airway and adequacy of respiration, provide **supplemental oxygen** and continue to monitor his or her airway status.
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- Aggressively initiate fluid therapy if the patient has a low blood pressure or appears to be in hypovolemic shock.

GI DECONTAMINATION

- Since barbiturates are well adsorbed by **activated charcoal**, an initial dose of 1 g/kg

- Because barbiturates slow intestinal motility. Only perform GI decontamination after the airway is protected.

ENHANCEMENT OF ELIMINATION

- **Forced diuresis with alkalinisation of urine:** alkalinization of the urine enhances the elimination of phenobarbital

- Long half-life allow a larger proportion of drug to be renally excreted.

- **HAEMODIALYSIS AND HAEMOPERFUSION:**
- Enhance elimination of barbiturates, hemoperfusion is more efficacious than hemodialysis

- Hemodialysis or hemoperfusion may be of benefit for patients resistant to standard supportive care

- Case report an 18-year old girl was admitted in the medicine department in an unconscious state with no response to deep painful stimuli (grade III coma).

- She was intubated nasally and ventilated. guided fluid therapy was started.

- Forced alkaline diuresis was started. One litre of lactated ringer solution was rushed and injection sodabicarbonate 50cc was given intravenously six hourly.

- Management of barbiturate poisoning 1. Cardiorespiratory support A clear airway is ensured by thorough suctioning and insertion of oral airway.

- . a. Frequent doses of activated charcoal, Forced diuresis with alkalinisation of urine:

REFERENCES

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