

TOXICOLOGY - II**RECENT DEVELOPMENTS IN THE MANAGEMENT OF POISONING*****Ravikumar T**

Abstract: Management of the child with poisoning begins with recognition of the agent(s) involved, identification of the signs of toxicity and assessing the severity. Therapy involves the provision of supportive care, prevention of poison absorption and when appropriate, the use of antidotes and other interventions to enhance elimination of the toxin. Extracorporeal treatment is considered if the manifestations are severe and the poison is dialyzable. Extracorporeal treatment, modalities include hemodialysis, continuous renal replacement therapy, peritoneal dialysis, hemoperfusion, therapeutic plasma exchange, albumin dialysis

Keywords: Extracorporeal treatment, Poisoning, Children.

Points to Remember

- *Extracorporeal treatment is required only in 0.1% of intoxications, when the patient has developed life-threatening manifestations of poisoning and alternative treatment is not available.*
- *Conventional treatment must be performed promptly and completely in each case before extracorporeal treatment is initiated.*
- *The goal of ECTR is to maximize poison elimination or harmful metabolites from the body by diffusion, convection, adsorption and centrifugation.*
- *Various methods of ECTR include hemodialysis, continuous renal replacement therapy, peritoneal dialysis, hemoperfusion, therapeutic plasma exchange and albumin dialysis.*
- *Four critical determinants will decide whether ECTR may successfully enhance poison removal like molecular weight of the poison, protein binding, endogenous clearance and volume of distribution of the poison.*
- *Intravenous lipid emulsion acts as antidote for local anesthetic severe/systemic toxicity, which acts as a sink/sponge, extracting lipophilic drug molecules.*
- *EXTRIP (Extracorporeal treatment in poisoning) is a group of experts who have given guidelines and expert opinion on indications to initiate either therapeutic or prophylactic measures, based of concentration levels, preferred modality and also when to cease ECTR.*

References

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