PRINCIPLES IN MANAGEMENT OF TOXICITY CASE – PART 2

Practical Clinical Toxicology

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2. ENHANCING ELIMINATION OF THE TOXIN

- **INDICATIONS**

Toxins with small volume of distribution (remain in blood compartment).

METHODS OF INCREASE ELIMINATION OF TOXIC AGENTS

- Forced diuresis

- FORCED DIURESIS

To produce diuresis by volume expansion with Na-containing solutions

- **ION TRAPPING**
- Alteration of urine PH to prevent renal reabsorption

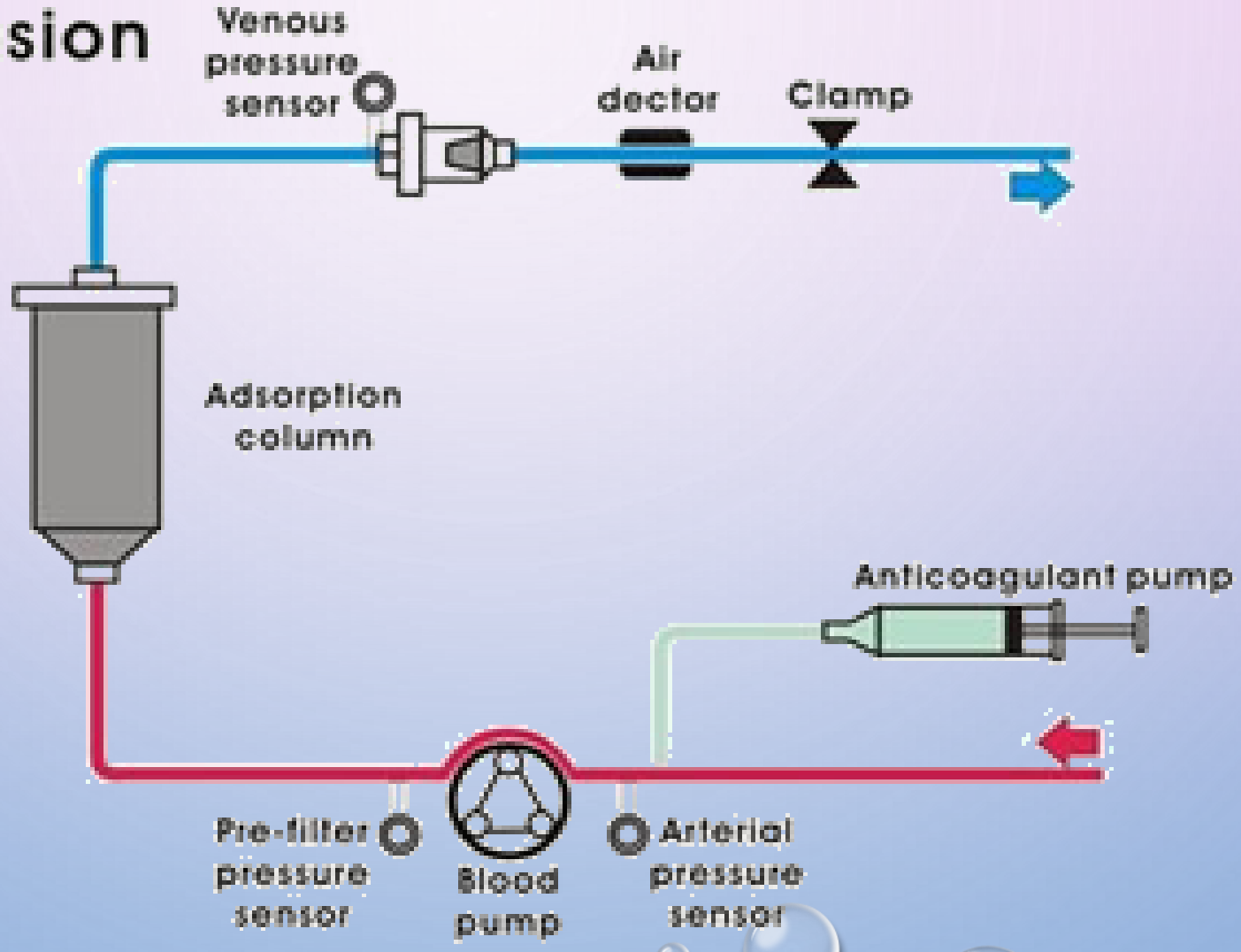
- Extracorporeal methods
  - Dialysis: For dialyzable toxin
- A. Peritoneal dialysis


Peritoneal
Cavity

B. HEMODIALYSIS

- HEMOPERFUSION

Hemoperfusion



- HEMOFILTRATION
- Enhance the elimination of very HMWT(10.000-40.000 Dalton)

- PLASMAPHERESIS
- Enhance elimination of large M.WT compounds (greater than 15.000 Dalton)

- EXCHANGE TRANSFUSION
- Same as plasmopheresis, but the replacement of removed blood is with packed red blood cells or platelets.

3. ANTIDOTES

- An antidote is a substance which can counteract a form of poisoning

REFERENCES

1- GOSSEL TA, BRICKER TD, (EDS.); PRINCIPLES OF CLINICAL TOXICOLOGY; LATEST EDITION.

2- VICCELLIO P, (ED.); HANDBOOK OF MEDICINAL TOXICOLOGY; LATEST EDITION.

3- JOURNALS OF PHARMACOLOGY AND TOXICOLOGY