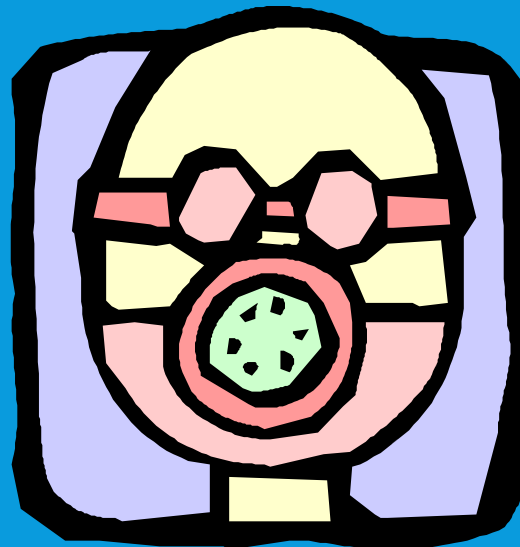
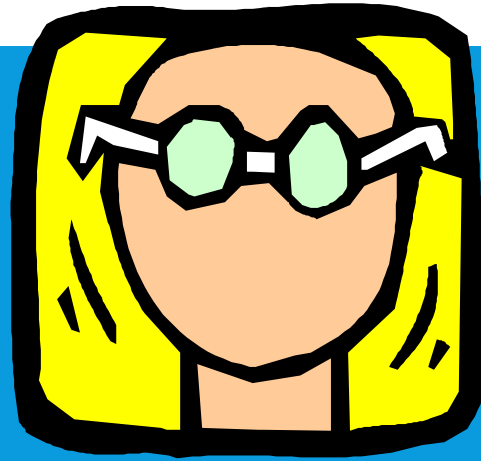


DEFINITIONS

- **Poison / Toxin**
- **Poisoning / Toxicity / Intoxication**
- **Toxicant / Poisoned pt.**
- **Exposure**

METHODS OF EXPOSURE

- Dermal
- Oral
- Inhalation
- Eyes
- Injection



POTENCY

- High potency or very toxic
 - **CN-H / Aluminium phosphide/ Propranolol/ TCAs**
- Moderate
 - **Malathion**
- Low
 - **BZD**

TOXICITY OR POISONING

- Drug Toxicity
- Non- Drug Toxicity

MODE OF TOXICITY

- Intentional
 - Suicidal**
 - Murder**
- Accidental
- Medication, Overdose

TIMING

- Acute
- Chronic
- Acute on Chronic

Poisoning

almost have

no specific presentation

PRESENTATION OF POISONED PT.

- ASYMPTOMATIC

- Non- Specific

- TOXIDROM:

 - Cholinergic

 - Anticholinergic

 - Sympathomimetic

 - serotonergic

 - opioid

 - N.M.S

 - Withdrawal syndrome

ASYMPTOMATIC PT.

- NO POTENT POISON
- LOW AMOUNT POISON
- PT. TOLERANCE
- NO ABSORPTION
- NO METABOLIZATION
- PSEUDOSUICIDE
- PREHOSPITAL CARE

NON SPECIFIC PRESENTATION

- Psychiatric
- Neurologic
- Fluid & electrolyte disturb. & unexplained metabolic Acidosis
- A.R.F, Multi organ failure
- Infectious
- G.I. upset
- Cardiovascular

OPIOIDS

- Pin point pupil
- LOC
- Respiratory depression

CHOLINERGIC

- Miosis
- Wet & Cool skin(sweating)
- Increased bowel sounds
- Lacrimation
- Urination
- Diarrhea/vomiting
- Bronchorrhea
- Bronchospasm
- Bradycardia

ANTICHOLINERGIC

Peripheral

- Hot & dry skin
- Mydriasis
- Dry mucosa
- Tachycardia
- Urinary retention
- Abdominal distension

Central

- Fever
- Hallucination
- Delirium
- Seizure
- Coma

SEROTONERGIC

- Clonus
- Agitation
- Diaphoresis
- Increased muscle tone
- Fever
- Hyperreflexia
- Tremor
- Confusion
- Tachycardia
- Hypertension
- Shivering

SYMPATHOMIMETIC

- Agitation
- Tremor
- Seizure
- Diaphoresis
- Tachycardia
- Increased blood pressure

NMS

- Hx of Anti psychotics
- Fever
- Muscle rigidity
- LOC
- Autonomic instability
- Increased blood pressure
- Elevated CPK

WITHDRAWAL SYNDROME

- Tachycardia
- Increased blood pressure
- Agitation
- Yawning
- Rhinorrhea
- Piloerection
- Diarrhea & vomiting

GENERAL APPROACH TO POISONED PTS

- EMERGENCY MANAGEMENT
- CLINICAL EVALUATION
- PREVENTION OF ABSORPTION
- SPECIFIC THERAPY (Antidote)
- ELIMINATION ENHANCEMENT
- SUPPORTIVE THERAPY
- OBSERVATION & DISPOSITION

EMERGENCY MANAGEMENT

- **B.L.S & A.L.S (A, B, C, D)**
 - **Air way Management**
 - **Breathing**
 - **Circulatory Support**
 - **Treatment of Shock & Hypotension**
 - **Fluid & Electrolyte Correction**
 - **Acid - Base disturbances**
 - **Antidotal therapy**

SEVERE POISONING

- Suction
- Endotracheal Intubation
- ICU admission
 - **Pulse Oximetry**
 - **Mechanical Ventilation**
 - **Cardiac Monitoring**
 - **Pressor agents**



DECONTAMINATION

- Gastric lavage
- Activated charcoal
- Sorbitol
- Washing
 - Soap & water
 - Ethyl alcohol



CLINICAL EVALUATION

- HX. TAKING
- PHYSICAL EXAMINATION
- ✱ ASSESMENT OF TOXIC MAJOR SIGNS
- EVALUATION OF LAB. DATA
- OTHERS : X-Ray, E.C.G , . . .

MAJOR SIGNS

- Pupil size
- Mental status & Neurologic signs
- Cardiac Dysrhythmia
- Acid - Base Disturbance specially unexplained high Anion - Gap Metabolic Acidosis

PREVENTION OF ABSORPTION

- **GASTRIC DECONTAMINATION :**
 - **Emesis:** Ipecac
 - **G. Lavage:** N/S , Na bicarbonate. , K permanganate
- **ACTIVATED CHARCOAL**
- **DILUTION**
- **CATHARSIS :** Sorbitol
- **W.B.I**
- **OTHERS :** Endoscopy, surgery

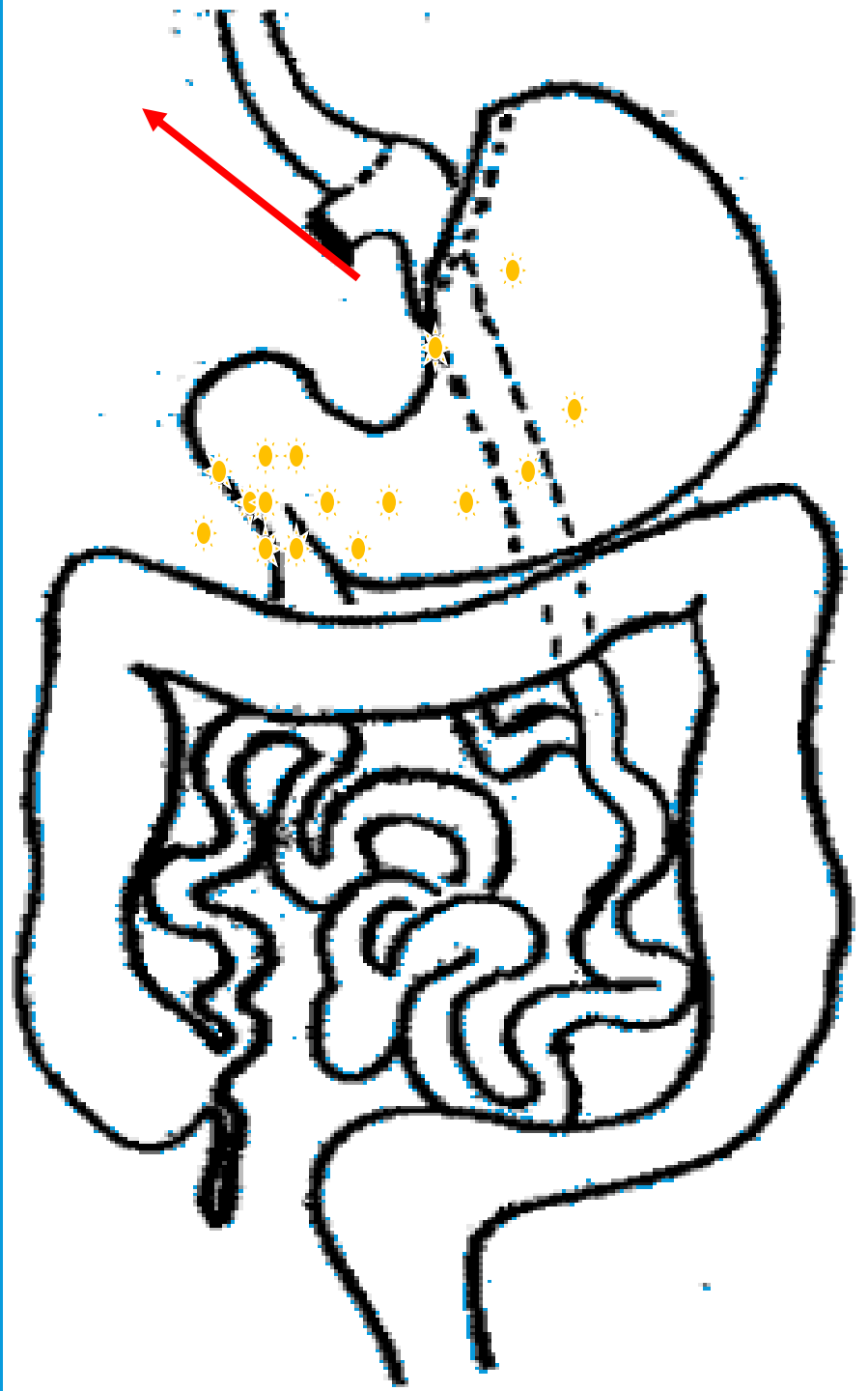
***GASTRIC
DECONTAMINATION***



Vomiting
G. Lavage

O.G.T

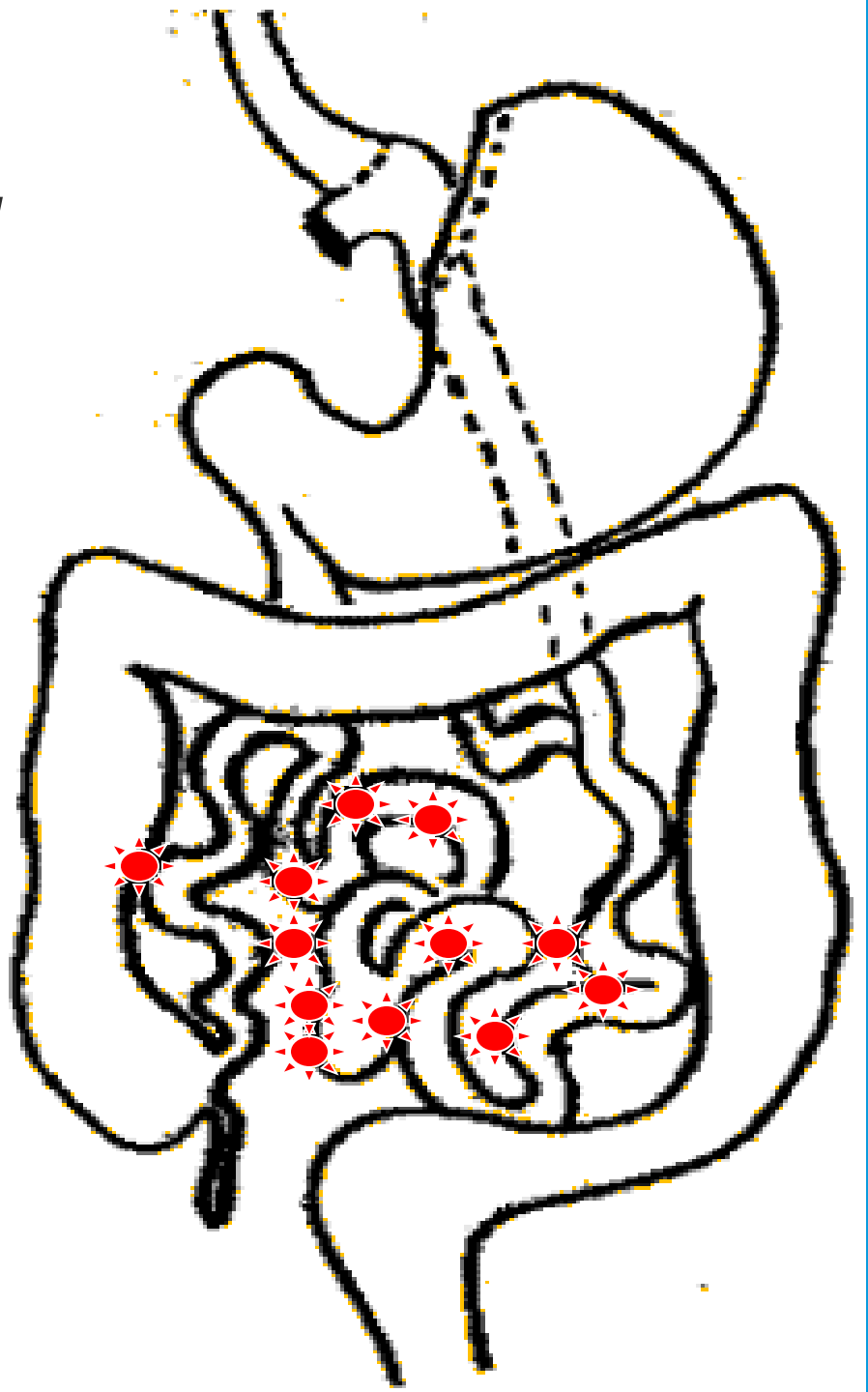
N.G.T



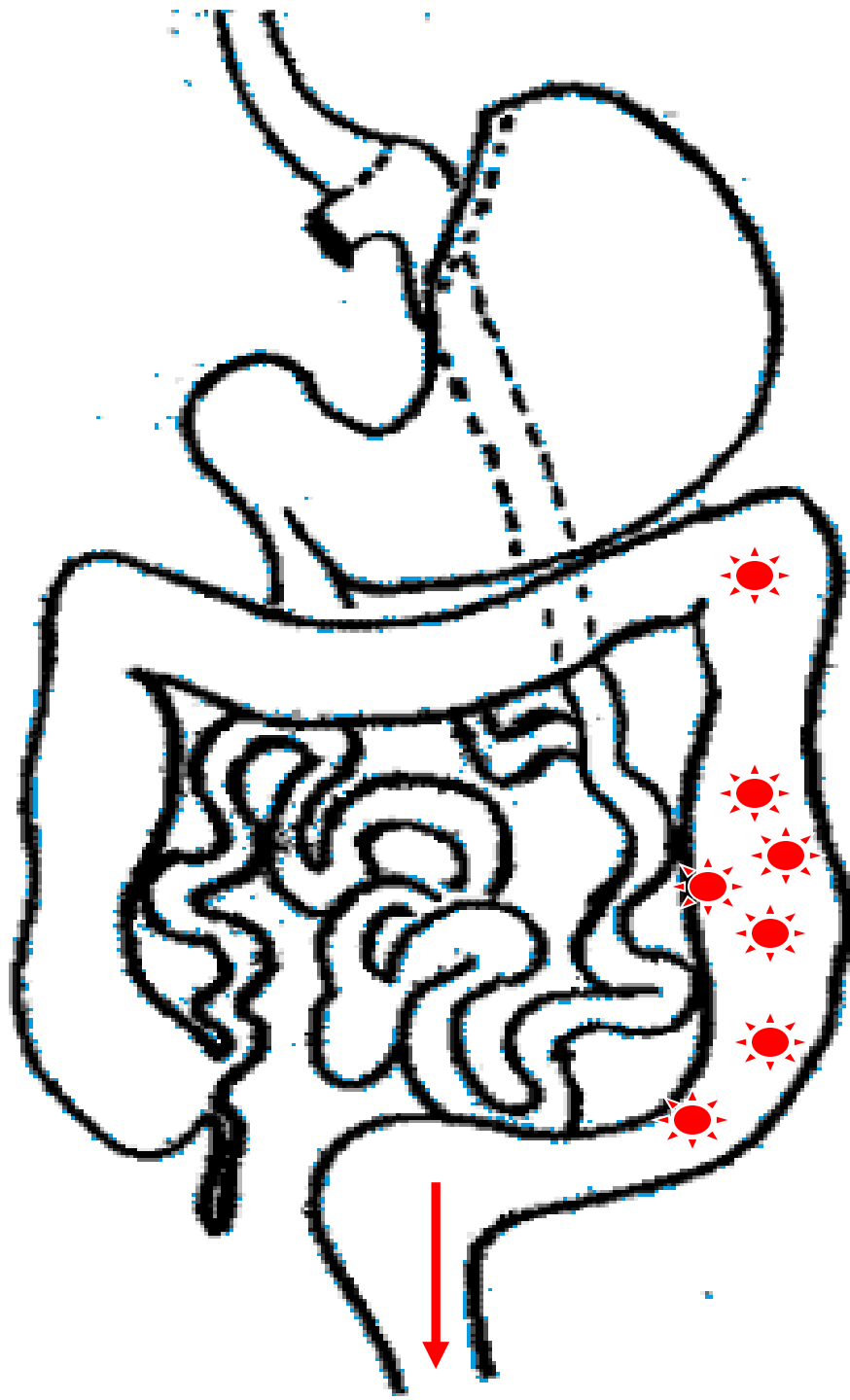
PREVENTION OF ABSORPTION



Charcoal
Cathartics
W.B.I



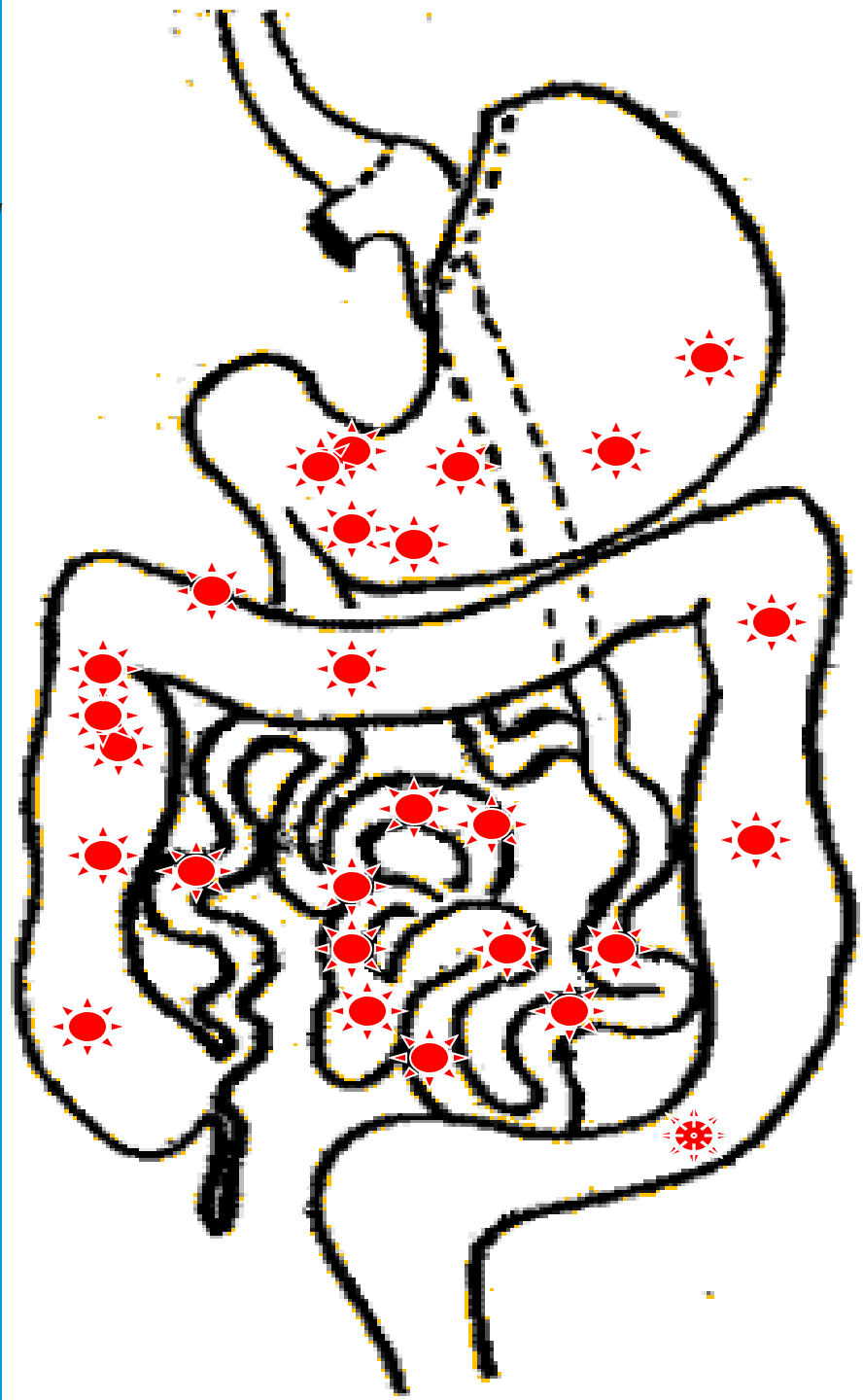
Laxative
Enema
W.B.I



PREVENTION OF ABSORPTION



Gastric washing
W.B.I
Charcoal
Cathartics



CONTRAINDICATION FOR EMESIS & G. LAVAGE

- Comatose Pt. & Seizure State
- Lack of Gag Reflex
- When Stomach is Empty
- Acute M.I
- Corrosive Ingestion : Acids, Alkali ,...
- Hydrocarbons
- Active G.I.B or Coagulopathy

ACTIVATED CHARCOAL

- Broad Absorption Surface
- Make a reversible Complex
- No Body Absorption
- Safe in Child & Pregnant woman
- Many Drugs & Chemical Sub. Absorb.
- Low - Water Soluble & Non-Ionized Sub. Better Absorb.

ACTIVATED CHARCOAL

- Single dose (SDAC)
- Multiple dose (MDAC)

M.D.A.C (G.I. DIALYSIS)

- Drugs with E.H. Circulation : **Phenobarb. , Theophylline, . . .**
- Bezoar Formation : **Salicylates, Fe, . . .**
- Enhanced Elimination : **Dig. , C.M.Z.P, V.P.A, Quinine, Meprobamate, Salicylate, Dopson, Phnylebutasone, . . .**
- Sustained - Release Formulation

ELIMINATION ENHANCEMENT

- Urinary Alkalization & Forced Diuresis
- G.I. Dialysis (M.D.A.C)
- Hemodialysis
- Hemoperfusion & Filtration
- Blood Exchange

SEVERITY

- HX. (Dosing)
- Clinical status
- Para-clinic data

NON-TOXIC SUBSTANCE

- **Household items :**
 - Baby Product
 - Candle
 - Clay & Caulk
 - Cosmetic & Lipstick
 - Eraser
 - Shampoo & Soap
 - Toothpaste
 - Water color paints
 - Thermometer Mercury
- **Medication**
 - Antacids
 - Calamine Lotion
 - Birth control Pill (single ingestion)
 - Mineral Oil
 - Some Oral Antibiotics
 - Water Soluble Vitamins
 - Zinc Oxide

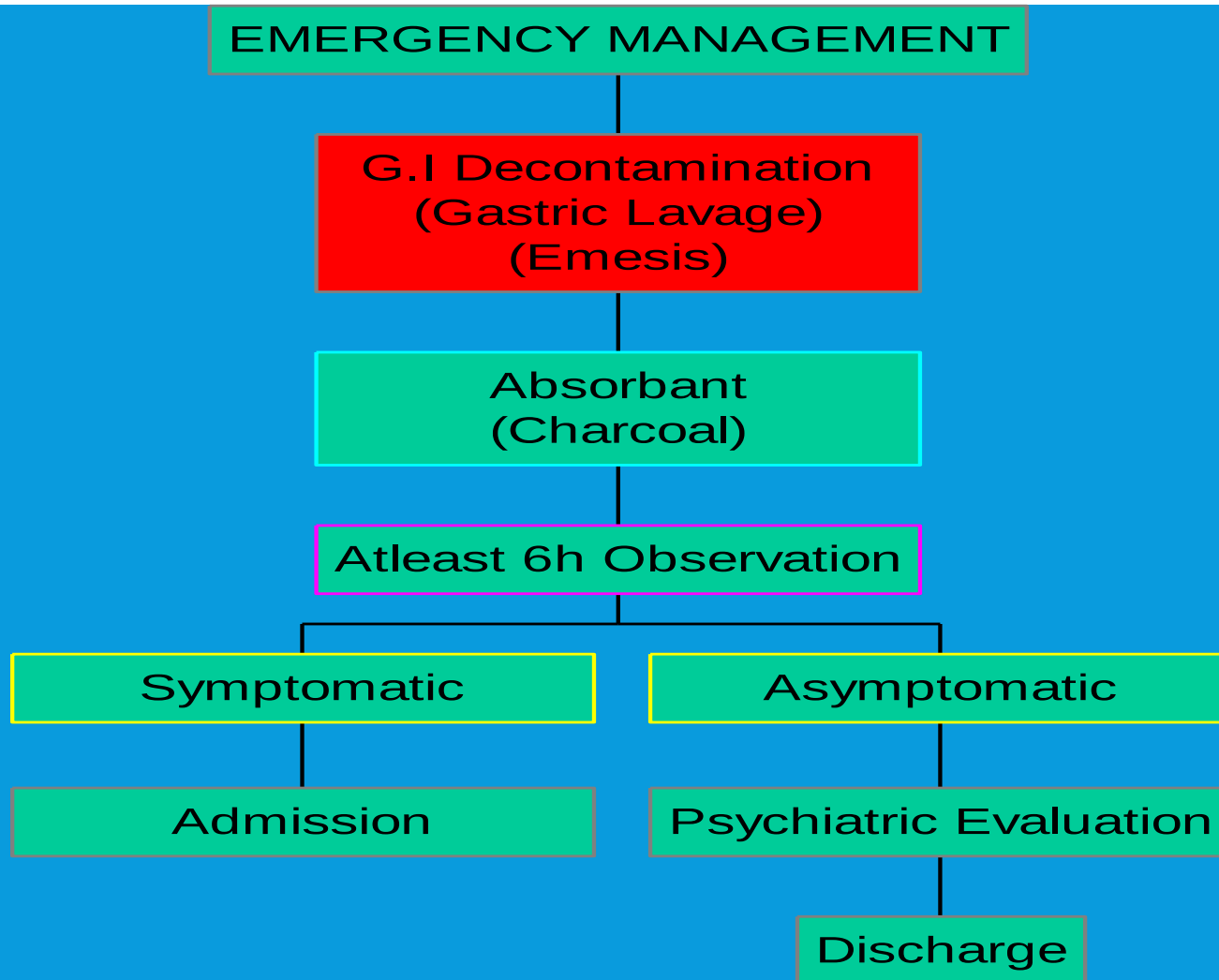
MANAGEMENT OF NON-TOXIC INGESTION

- Need no Lab. Test
- NEED No Treatment
- Only Observation For 6 h
- * Follow-up must be available & reliable
- * If any of these aren't met, pt. should be managed as an unknown ingestion

UNKNOWN INGESTION

- Suicidal Cases
- Amount of Ingested isn't Clear
- Kind of Ingested Drug or poison isn't Clear

APPROACH TO UNKNOWN INGESTION





" I admire your persistence doctor. But face it. You've lost this patient."