

تقديم به شما



ANTIDOTES

DR. FAZEL GOUDARZI; TRAUMATO
PATHOLOGIST AND CLINICAL
TOXICOLOGIST

SHIRAZ UNIVERSITY OF MEDICAL
SCIENCES

آنتی دوت ها

- ❖ برای خیلی از سموم یا داروها آنتی دوت ها وجود دارد.
- ❖ استفاده از آنتی دوت ها بخصوص در دقایق اولیه یا حتی ثانیه های اولیه بسیار مفید می باشد.
- ❖ یکی از راههای بسیار موثر درمانی در مسمومیت ها میباشد

Toxins and their Antidotes

Acetaminophen → N-acetylcysteine

Anticholinergics → Physostigmine

Anticholinesterases/ → Atropine
Cholinergics (muscarinic effects)

Pralidoxime
(nicotinic effects)
-controversial in
carbamate
Ingestions

Toxins and their Antidotes

Benzodiazepines → Flumazenil

Botulism → Botulinum antitoxin

Beta-blockers → Glucagon

Calcium channel blockers → Calcium

Carbon monoxide → Hyperbaric O₂, O₂

Cyanide, Nitrites → Amil nitrit; Na nitrit(300mg/10ml)
thiosulfate(12.5g/50ml)

Toxins and their Antidotes

Digoxin → Digibind aka Digoxin Fab antibodies

Ethylene Glycol → Ethanol

Heparin → Protamine

Iron → Deferoxamine

Isoniazid → Pyridoxine

Toxins and their Antidotes

Lead → EDTA, BAL, DMSA

Methanol → Ethanol

Methemoglobin → Methylene blue

Opioids → Naloxone

Tricyclic antidepressants → NaHCO₃

Warfarin (Superwarfarins) → Vitamin K

Toxins and their Antidotes

- Antivenom.....Snake Bite
- Anti Scorpion.....Scorpion Bite
- Benztropin.....Alternative for
Diphenhydramin 1-2mg i.v or oral
- Bromocriptin.....NMS 2.5-10 Mg
orally 3-4times daily

Toxins and their Antidotes

- L-Carnitine. (Levocarnitin).....Na valp and Hyperamonemia
- Charchol.....For many toxins and drugs
- Cyproheptadine.....Serotonin Syndrome
- Dantrolene.....Malignant Hyperthermia (skel. Musc. Relaxant)1-2mg/kg iv rapidly

Toxins and their Antidotes

- Diazoxid.....Antihypertensive crisis and hypoglycemia
- Diphenhydramine.....EXTRAPYRAMIDAL
- Dpta.....plutonium exposure 1g iv slow
- Epinephrine.....Anaphylactoid reaction
- Folic acid.....Methanol

Toxins and their Antidotes

- Fomepizol.....Methanol and Ethylenglycol 15mg/kg stat -10mg/kg q12hcont.
- Glucose.....Hypoglycemia
- Halopridol and Droperidol.....Drugs indu. Aggitation
- Hydroxycobalamin.....ACUTE CYANIDE POISONING 5G IN ADULT- 70mg/kg in child. Iv infusion

Toxins and their Antidotes

- Iodide (KI).....exposure to Radioactive iodine. 0-1m 16mg daily
- 1m-3y 32mg daily
- 3-18y 65mg daily
- more than 18y 130mg daily
- Of tab. 130& 65mg. Syr:325mg kcl/ 5 ml (lugol solution)

Toxins and their Antidotes

- Nalmefen.....OPIOIDS
- O2.....CO
- SUCCIMER.....LEAD/MERCURIC SALT/
ARSENIC

Selected Antidotes and Their Indications

ANTIDOTE	INDICATION (POISON)
<i>N</i> -acetylcysteine	Acetaminophen
Fomepizole (4-MP)/ethanol	Methanol/ethylene glycol
Oxygen/hyperbarics	Carbon monoxide
Naloxone	Opioids
Physostigmine	Anticholinergics
Atropine/pralidoxime (2-PAM)	Organophosphates
Methylene blue	Methemoglobinemia
Nitrites/hydroxycobalamin	Cyanide
Deferoxamine	Iron
Dimercaprol (BAL)	Arsenic, lead
Succimer (DMSA)	Lead, mercury
CaEDTA	Lead
Fab fragments	Digoxin, crotalids
Glucagon	β -blockers
Sodium bicarbonate	Salicylates, tricyclic antidepressants
Calcium, insulin/glucose	Calcium channel antagonists
Dextrose, glucagon, octreotide pyridoxine (vitamin B ₆)	Oral hypoglycemic agents Isoniazid (INH)
Intravenous fat emulsion	Local anesthetic systemic toxicity Certain fat-soluble medications

Table 3.22: Adjunctival Antidotes

<i>Agent</i>	<i>Indication</i>
Activated charcoal	For most poisons (Refer Table 3.18)
Benztropine	Dystonia
Chlorpromazine	Psychotic states
Corticosteroids	Acute allergic reaction, laryngeal oedema
Diazepam	Convulsions
Diphenhydramine	Dystonia
Dobutamine	Myocardial depression
Dopamine	Myocardial depression, vascular relaxation
Epinephrine	Anaphylactic shock, cardiac arrest
Furosemide	Fluid retention, left ventricular failure
Glucose	Hypoglycaemia
Haloperidol	Psychotic states
Heparin	Hypercoagulability
Lidocaine	Ventricular arrhythmias
Mannitol	Cerebral oedema, fluid retention
Oxygen	Hypoxia
Pancuronium	Convulsions
Promethazine	Allergic reactions
Salbutamol	Bronchoconstriction
Sodium bicarbonate	Metabolic acidosis



Thanks for your attention