

### Acetaminophen OD

Antidote: N-acetylcysteine (Acetadote, Mucomyst)

**Stg1 (<24h):** asymp or a/n/v, malaise. Labs: (~12hr) Elevated LFTs (ALT, AST).

**Stg 2 (1-3d):** a/n/v, RUQ pain; tachycardia, hypotension (fld loss). Labs: Elevated ALT, AST, PT, INR, bili, possible nephrotoxicity/-renal function abn.

**Stg 3 (3-4d):** n/v/pain, tender liver, coma; multi-organ failure; hepatic probs- jaundice, coagulopathy, hypoglycemia, hepatic enceph; possibly act renal failure & death. Labs: severe hepatotoxicity evident, hepatic necrosis (liver biopsy dx).

**Stg 4 (4d-3wk):** Complete resolution of symptoms & hepatic dysfunction

### Anticholinergics

Antidote: Physostigmine

Hyperthermia, tachycardia, wide pulse pressure, arrhy, circ collapse, resp distress

Central: agitation, ataxia, auditory/visual hallucinations, cogn decline, come (late), confusion, delirium, diminished concentration, forgetfulness, fatigue, poor coordination, restlessness, sedation, seizures

Decreased secretions: gastric & lacrimal, dry mouth, dry skin (no sweating)

GI/GU: hypoactive bowel sounds, constipation, ileus, urinary ret

Ocular: blurred vision, mydriasis, precip narrow-angle glauc

SM: dysarthria, m twitching, diminished m tone (late)

### CCBs

Antidote: Calcium chloride/gluconate, Glucagon, Insulin/glucose

### Carbon Monoxide

Antidote: 100% O<sub>2</sub>

### Cholinergics

Antidote: Atropine, Pralidoxime

Etiology: Physostigmine, Pilocarpine, Pyridostigmine

DUMBELLSS: Dia, Urination, Miosis, Bradycardia, Emesis, Lacrimation, Lethargy, Salivation, Seizures

Complications: resp failure (rapid onset), seizure, dehydration, neurological sequelae

Killer B's: Bradycardia, Bronchorrhea, Bronchospasm (wheezing)

n/v/cramps, increased secretions; conduction abn (AVB, cardiac arrest)

Tx:

### Cyanide Poisoning

Antidote: Methylene blue, Cyanide antidote kit (Liliy Kit), Hydroxycobalamin (Cyanokit), Amyl nitrite, Sodium nitrite, Sodium thiosulfite

Early: HA, anxiety, confusion, tachypnea, tachycardia

Late: Alt LOC, seizures, hypoventilation, hypotension, dysrhy (AVB, VF, SVT)

Nursing

Monitor methemoglobin levels (shouldn't exceed 20%)

### Digoxin Toxicity

Therapeutic Dose: 0.8-2.0

Antidote: Digoxin FAB (Digibind)

GI/GU: a/n/v/d, abd pain (late sign), excessive nocturia

### Digoxin Toxicity (cont)

Neuro: HA, fatigue, weakness, confusion, delirium

Visual: green-yellow halos around images/lights, alt color perception, blurred or double vision, seeing spots, photophobia

CV: irreg pulse, palps;

EKG: ST seg dpr, inverted T, sinus brady; VT/F/flutter; Paroxysmal atrial tach; Sinoatrial, bundle branch, or AV block

Other Tx: Lidocaine, Atropine (bradycardia), Dilantin

### Heavy Metal Poisoning

(Arsenic, Copper, Lead, Mercury)

Antidote: EDTA, Succimer (DMSA), Dimercaprol, Penicillamine

### Iron Poisoning

Antidote: Desferoxamine

### Isoniazid Overdose

Antidote: Pyridoxine

### Lead Poisoning

Antidote: Edetate disodium (EDTA), Dimercaprol (BAL), Succimer (CHEMET)

HA. ataxia, tremors, convulsions, vertigo, hearing loss, delusions, insomnia, irritability, aggressive behavior, attention probs

Distal neuropathy, paresthesia, reduced sensation, muscle weakness

Poor appetite, abd pain, constipation, anemia

Delayed growth, reduced IQ, loss of developmental skills

### Methanol

Antidote: Ethanol

### Lithium Toxicity

Therapeutic range: 0.6-1.0

Etiology: OD, volume depletion, reduced GFR, med interactions (ACEIs, NSAIDs, Thiazide diuretics)

**Mild (<1.6):** n/v/d, apathy, irritability, impaired memory, lethargy, proximal muscle weakness

**Mod (<2.5):** (neurotox) confusion, drowsiness, blurred vision, slurred speech, progressing tremor, unsteady gait, incont

tremors, fasciculations, clonus, ataxia, dysarthria, hyperreflexia; stupor, coma, seizures

**Severe (>2.5):** (nephrotox) nocturia, distal tubular acidosis, seizure, coma, (cardiotox) ST changes, QT prolong, flat T, hypotension, conduction delay, dysrhy (VT), CV collapse,

SILENT (syndrome of irreversible lithium-effectuate neurotoxicity): after d/c lithium >2min; truncal ataxia, ataxic gait, scanning speech, incoordination

Tx: Li levels q2-4h, IV fluids (bolus + 1.5-2x maintenance), bowel irrigation w/PEG for severe acute ingestion; Hemodialysis if severe tox, renal insuff + Li >2.5, Li >4

### Heparin Overdose

Antidote: Protamine Sulfate

### Warfarin/Anticoags

Antidote: Vitamin K

### Ethylene glycol

Antidote: Fomepizole (Antizol)

### Opioid Overdose

Antidote: Naloxone

### Benzodiazepine Overdose

Antidote: Flumazenil 0.1 mg/min infusion to 1 mg

### Valproate Overdose

Antidote: Camitine