

Stimulant Drugs of Abuse

I. Amphetamines

A. Effects

1. Euphoria
2. Agitation/psychosis
3. Chest pain
4. Seizures
5. Hyperthermia

B. Mechanism

1. _____ reuptake inhibition

C. Antidote/Treatment

1. Supportive cares
2. _____ management
3. Agitation/Psychosis
 - a) _____
 - b) _____

II. Cocaine

A. Effects

1. Euphoria
2. Agitation/psychosis
3. Chest pain
4. Seizures
5. Hyperthermia

B. Mechanism

1. _____ reuptake inhibition
2. Snorted in cocaine form
3. "Crack" form can be smoked

C. Antidote/Treatment

1. Supportive cares
2. Temperature management
3. Agitation/Psychosis
 - a) _____
 - b) _____

III. MDMA (methylenedioxymethamphetamine)
(AKA: Molly, Ecstasy)

A. Effects

1. Euphoria
2. Increased social interaction
3. Tactile stimulation enjoyed by users
4. Serotonin syndrome
5. Renal failure
6. Agitation
7. Seizures
8. Hyperthermia

B. Mechanism

1. _____ reuptake inhibition

C. Antidote/Treatment

1. Supportive cares
2. Temperature management
3. Agitation/Psychosis
 - a) _____
 - b) _____

IV. Synthetic cathinones (AKA: Bath salts)

A. Effects

1. Euphoria
2. Agitation/psychosis
3. Seizures
4. Hyperthermia

B. Mechanism

1. _____ reuptake inhibition

C. Antidote/Treatment

1. Supportive cares
2. Temperature management
3. Agitation/Psychosis
 - a) _____
 - b) _____

Selected Toxins

I. Acetaminophen

A. Mechanism

1. Depletes _____ → increased toxic _____ levels

B. Symptoms/Findings

1. 0-24 hrs.: _____
2. 24-72 hrs.: Abdominal pain, _____
3. 72-96 hrs.: _____, _____, +/-death
4. 96 hrs.: recovery

C. Antidote/Treatment

1. _____
2. Rumack-Mathew nomogram guides treatment necessity

II. Methanol & Ethylene Glycol

A. Mechanism

1. Converted to toxic metabolites by _____

B. Symptoms/Findings

1. Ethylene glycol
 - a) _____
 - b) Heart failure
 - c) _____
 - d) Hypocalcemia
2. Methanol
 - a) _____
 - b) Seizures
 - c) Coma
 - d) _____

C. Antidote/Treatment

1. _____
 - a) Inhibits _____
 - b) Alcohols excreted by kidneys prior to conversion to toxic form
2. Ethanol
 - a) Competes for _____
 - b) Alcohols excreted by kidneys prior to conversion to toxic form

III. Carbon Monoxide

A. Mechanism

1. Binds to _____ and converted to _____
 - a) _____
 - b) Oxygen carrying sites bind oxygen more strongly, reducing release to tissues, causing tissue hypoxia

B. Symptoms/Findings

1. "_____ " skin appearance
2. _____
3. _____
4. _____
5. Seizures
6. Coma
7. Death

C. Antidote/Treatment

1. _____
2. _____
3. _____

IV. Cyanide

A. Mechanism

1. Inactivates metalloenzymes after binding
2. Inactivation of _____ arrests cellular respiration (inadequate ATP production)

B. Symptoms/Findings

1. _____
2. Highly metabolic organs effected first
3. _____

C. Antidote/Treatment

1. _____
2. _____

V. Iron

A. Mechanism

1. High levels toxic to _____, _____, & _____ systems

B. Symptoms/Findings

1. Toxicity varies upon levels
2. GI disturbances
3. Hypotension
4. Hypovolemia
5. Metabolic acidosis
6. Liver failure
7. Multisystem organ failure
8. Death

C. Antidote/Treatment

1. _____
 - a) _____ & facilitates renal excretion

VI. Lead

A. Mechanism

1. Exposure from environment
2. Absorbed readily by children
3. Long half-life, 20-30 yrs. in bone tissue

B. Symptoms/Findings

1. CNS
 - a) _____
 - b) Headaches
 - c) _____
 - d) Confusion
 - e) _____
 - f) Coma
2. GI
 - a) Intestinal spasms/constipation
3. Hematologic
 - a) _____ (_____, _____)

C. Antidote/Treatment

1. _____
2. Dual therapy in _____
 - a) _____
 - b) _____

VII. Organophosphates/Carbamates

A. Mechanism

1. Increased _____ levels
2. Carbamates
 - a) _____ inhibition of acetylcholinesterase
3. Organophosphates
 - a) _____ inhibition of acetylcholinesterase

B. Symptoms/Findings

1. Excess acetylcholine
 - a) _____
 - b) _____
 - c) _____
 - d) _____
 - e) _____
 - f) Urination
 - g) Weakness
 - h) Hypertension

C. Antidote/Treatment

1. _____
2. _____ (_____)

Hallucinogens

I. LSD (lysergic acid diethylamide)

A. Mechanism

1. Partial agonist at _____ receptors

B. Symptoms/Findings

1. Colorful hallucinations
2. Sleep disturbance
3. Loss of judgement

II. Marijuana (THC)

A. Mechanism

1. _____ receptor agonist

B. Symptoms/Findings

1. Relaxation
2. Increased appetite
3. Improved pain control
4. Tachycardia
5. Hallucinations
6. Diminished short-term memory
7. Decreased motor activity

Ethanol

I. Mechanism

- A. Enhances effects of _____
 1. Induces release of _____ & _____

B. Symptoms/Findings

1. CNS depressant
 - a) Inhibition
 - b) Impaired cognition
 - c) Respiratory depression & coma at high levels
2. Wernicke encephalopathy
 - a) _____, _____, _____
3. Alcohol withdrawal
 - a) Life-threatening complication of alcohol abstinence in history of alcohol dependence
 - b) Symptoms/signs
 - (1) Anxiety/agitation
 - (2) Psychosis
 - (3) _____
 - (4) _____/_____ fasciculations
 - (5) _____ (peak @ 24 hours)

C. Antidote/Treatment

1. Wernicke encephalopathy
 - a) Glucose/_____
2. Withdrawal
 - a) _____
 - b) Thiamine/folate/glucose
 - c) Electrolyte management
 - d) Other agents: dexmedetomidine, barbiturates, antipsychotics
3. Alcohol use disorder
 - a) Behavioral counseling
 - b) Acamprosate
 - c) Naltrexone
 - d) Disulfiram