

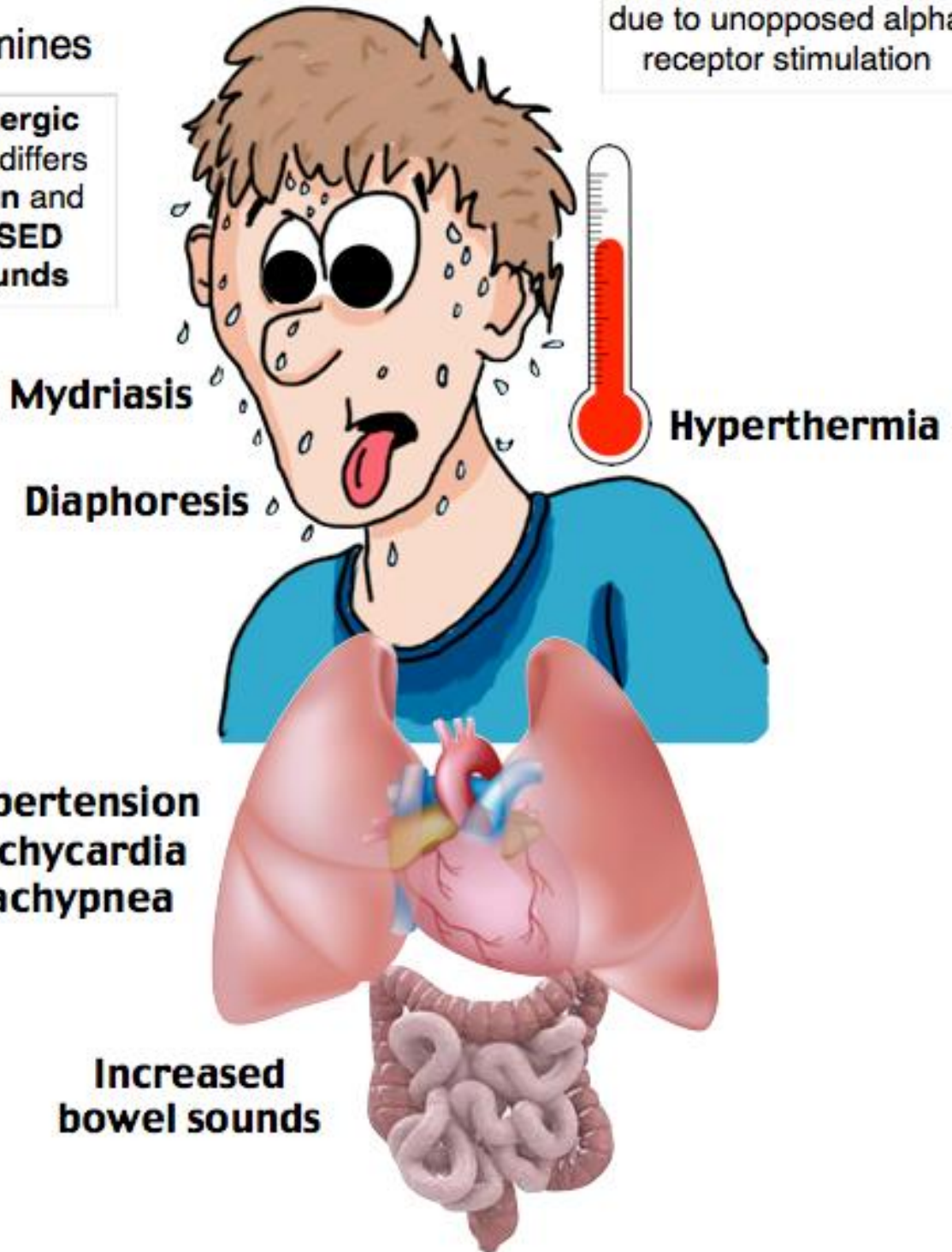
**TOXICOLOGY**

**SYMPATHOMIMETIC POISONING**

Cocaine  
Amphetamines

**Avoid beta-blockers**  
due to unopposed alpha  
receptor stimulation

**Anticholinergic  
toxidrome** differs  
by **DRY** skin and  
**DECREASED**  
bowel sounds



### **Mental Status**

- Hyperalert
- Agitation
- Hallucinations
- Paranoia

### **Vital Signs**

- Hyperthermia
- Tachycardia
- Hypertension
- Widened pulse pressure
- Tachypnoea

### **Other Manifestations**

- Diaphoresis
- Mydriasis
- Tremors
- Hyperreflexia
- Seizures
- Rhabdomyolysis
- Increased bowel sounds

### **Examples of toxic agents**

- Cocaine
- Amphetamines
- Methamphetamines
- Ephedrine
- Pseudoephedrine
- Theophylline
- Caffeine

**Pathophysiology** (varies depending on drug & some drugs have multiple mechanisms):

- Direct stimulation of alpha and beta adrenoceptors (albuterol).
- Release of noradrenaline from the presynaptic neurone (amphetamines).
- Prevention of reuptake of noradrenaline from the synapse (cocaine).
- Prevention of noradrenaline metabolism by monoamine oxidase (MAOIs).

### **Treatment**

- Benzodiazepines for agitation and seizures
- GTN/phentolamine for hypertension not responding to benzodiazepines
- Aspirin, GTN and benzodiazepines for chest pain.
- Cooling +/- dantrolene for hyperthermia.