

## STUDY POINTS

# Toxicants and Toxins

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*MyToxCert study points can be used to focus areas of study and preparation. The study point does not contain specific information that would lead you to the diagnosis or correct answer but would instead direct you to learning and reference materials.*

### ***Toxicants and Toxins Study Points***

#### **Laboratory Studies**

- Laboratory abnormalities in APAP overdose
- Drugs capable of causing false positive immunoassay urine test for amphetamines

#### **Actions and Effects**

- Mechanism of action of the antidiabetic medications
- Mechanisms of drug-induced hypoglycemia
- Life-threatening dysrhythmias due to overdose
- Mechanisms of drug-induced QT prolongation
- Recognition and management of drug-induced QT interval
- Electrocardiographic patterns of antidysrhythmic toxicity
- Causes of dysrhythmias with opioid misuse
- Differential diagnosis of drug-induced bradycardia and hypotension
- Characteristics of Type I antidysrhythmics
- Adverse events associated with anticonvulsant medications
- Toxicity from intravenous acetaminophen overdose
- Pharmacokinetics of extended release/modified release acetaminophen
- Recognition of clinical features of drug eruptions and cutaneous drug reactions
- Antiplatelet drug toxicity
- Drug Induced Hypersensitivity Syndrome
- Adverse effects of antimalarials
- Drug-drug interactions between anticoagulants and drugs used to treat COVID-19
- Mechanisms of anticonvulsants

### **Metabolism**

- Metabolism of anticoagulants
- $\gamma$ -glutamyl cycle and 5-oxoprolinemia related to acetaminophen
- Characteristics of lidocaine and metabolites

### **Treatment**

- Management of anticoagulant toxicity
- Management of thyroid medication toxicity
- Management of sulfonylurea poisoning
- Management of drug-induced hypoglycemia
- NAC infusion reactions and adverse effects
- Management of acetaminophen toxicity
- Management of anticonvulsant toxicity
- Extracorporeal removal of toxins

### **Additional Topics**

- CYP enzymes that metabolize acetaminophen
- Drugs for performance enhancement in sport

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