

# Alcoholism: Anesthetic Concerns

**Anesthetic Pearls:** Anesthetic Implications and Management of Alcoholism

**Alcoholism** – affects 15% of Americans and 1/3 of adults have medical problems because of its use.

**Inhaled anesthetics:**

Acute intoxication - lowers MAC requirements

Chronic intoxication - raises MAC requirements

**Muscle relaxants** - may prolong effect because of reduced metabolism

**Narcotics** - may have decreased need because of intoxication or increased need because of cross-tolerance.

**Organ Systems** – Alcohol affects multiple different organ systems.

**Cardiac** - increased risk of cardiac dysfunction, hypertension, congestive cardiomyopathy, pulmonary HTN, right heart failure, dysrhythmias, and sudden death.

**Respiratory** - dysfunction of cilia, reduced surfactant production, increased risk of infection, and reduced lung capacities (decreased VC, FRC, IC).

**Gastrointestinal** - delayed gastric emptying, and increased risk of aspiration.

**Hepatic** - altered metabolism, decreased production of factors II, V, VII, X, and XIII, decreased albumin, increased bleeding risk.

**Nutrition** - deficiencies of thiamine lead to high output cardiac failure. Deficiencies of folic acid lead to bone marrow depression, thrombocytopenia, leukopenia, and anemia.

**Misc Issues**

Watch for withdrawal: insomnia, weakness, combative, tremors, disorientation, hallucinations, and convulsions. Peak onset is 10-30 hours.

Watch for delirium tremens: autonomic hyperactivity, tachycardia, diaphoresis, and hyperthermia. DT's are caused by acute abstinence and carries a 10% mortality.

Treat both with benzodiazepines.