Digoxin Toxicity Treatment

Digoxin (Digitalis) toxicity can be a life-threatening complication of taking this medication. It leads to CNS, visual, GI and cardiac manifestations. Treatment involves used of activated charcoal and normalization of potassium. If symptoms are rapidly progressing or if hyperkalemia cannot be controlled, digoxin immune fab (Digibind) is used. Rate control is done with magnesium sulfate and lidocaine and cardiac pacing.

PLAY PICMONIC

Activated Charcoal

Lit Charcoal

The first-line treatment for acute ingestion of digoxin is repeated dosing of activated charcoal. This interrupts enterohepatic circulation, decreasing the symptoms of toxicity.

Slowly Normalize K+

Snail Normalizing Bananas

Treating the electrolyte balance is paramount for digoxin toxicity treatment. Patients are typically hyperkalemic, and sodium bicarbonate, hemodialysis or binding resins can be used.

Digibind (Anti-Digoxin Fab)

Digital-ox-bound by cowboy

Digoxin immune therapy is one of the most effective methods for treating toxicity. Digoxin immune fab (Digibind) is first-line treatment if the patient has ingested large quantities of the medication, has a serum digoxin level greater than 10 ng/mL, has severe hyperkalemia greater than 5mEq/L, or rapidly progressing signs of toxicity.

Magnesium Sulfate

Magnesium-magazine with Sulfur-match

Magnesium sulfate is used to terminate arrhythmias in digoxin-toxic patients. Specifically, it is helpful in treating digoxin-toxicity tachyarrhythmias and multifocal atrial tachycardias.

Lidocaine

Lion-cane

According to ACLS guidelines, lidocaine can be given to control the premature ventricular contractions (PVCs) associated with digoxin toxicity.

Cardiac Pacing

Heart Paced by electricity

Patients who are unresponsive to pharmacologic intervention for the cardiac symptoms of digoxin toxicity can be given temporary cardiac pacing. This includes temporary transvenous or transcutaneous cardiac pacing to control the possibility of an arrhythmia progressing to ventricular fibrillation or asystole.