CTPER | Center for Toxicology and Pharmacology Education and Research
The Poison and Drug Information Centers of Arizona and the University of Arizona College of Medicine – Phoenix

Arizona Poison & Drug Information System - Chloroquine/Hydroxychloroquine Ingestion Guidelines

Acute Concerns Related to COVID-19

Background: These medications (hydroxychloroquine and chloroquine) are potentially dangerous when used inappropriately, have numerous drug-drug interaction (CYP 3A4, 2C8, 2D6), and can result in the following effects:

Neurologic: sedation and coma, seizures; psychosis/hallucinations (more commonly in kids).

Cardiac: hypotension, bradycardia, ventricular dysrhythmias, QTc prolongation (torsades de pointes).

Metabolic/Hematologic: hypokalemia, hypoglycemia; methemoglobinemia/hemolysis (G6PD deficiency pts)

Gastro-intestinal: nausea, vomiting, diarrhea.

Pulmonary: respiratory depression, apnea.

All symptomatic (and worrisome history) patients must be discussed with the on-call toxicologist.

Initial Treatment: All patients should be monitored for at least 6 hours and admitted if they develop any signs/symptoms of toxicity. GI decontamination should be considered in alert/cooperative patients presenting within one hour of ingestion. Early intubation for patients with CNS or respiratory dysfunction.
Other interventions include:

SEIZURES: GABA-agonist (higher-doses of lorazepam, diazepam, phenobarbital).

QRS WIDENING / DYSRHYTHMIAS: sodium bicarbonate (2 mEq/kg IVP); repeat ECG; consider infusion.

HYPOTENSION: 2 liters LR and epinephrine/norepinephrine infusion; start early and titrate.

Laboratory Testing: serial testing of ECGs, BMPs (potassium), CBC (hemolysis), continuous pulse oximetry, ABG and methemoglobin level for unexplained hypoxia; serum phosphate /calcium for non-medical products.

COVID-19 testing, serum pregnancy, ethanol and APAP/ASA in appropriate patients

All patients should be questioned about: reason for ingestion (specifically: risk for COVID-19 infection), other ingestions, and family/friends engaged in similar ingestions.

Daniel E Brooks MD (version1.0; 3/25/20)

F. Mazda Shirazi MD, PhD