Maryland Poison Center
UNIVERSITY OF MARYLAND SCHOOL OF PHARMACY

CHLOROQUINE and HYDROXYCHLOROQUINE TOXICITY

- **Small therapeutic window**
  - 1 – 2 tablets can be lethal in a child
  - 2 – 3 times the therapeutic dose can be lethal in a child
  - 3 – 5 times the therapeutic dose can be lethal in adults

- **Toxicity is fast**
  - Most die within 1-2 hours
  - Rapid onset of conduction disturbances – blocks Na, K, and Ca channels
    - Wide QRS, prolonged QTc
    - Re-entry arrhythmias
  - Hypotension, shock
  - Altered mental status –> seizures –> status epilepticus

- **Risk factors of poor outcomes**
  - Ingested amounts
    - ≥ 5g in adults (fatalities reported as low as 2.25 g)
    - ≥ 30 mg/kg in pediatrics (fatalities reported as low as 27 mg/kg)
  - SBP ≤ 80 mmHg
  - QRS ≥ 120 msec
  - K ≤ 2.0 mEq/L

- **Treatment is aggressive**
  - Epinephrine 0.25 µg/kg/min, titrating by 0.25 µg/kg/min to SBP >100 mmHg
  - HIGH DOSE Diazepam: 2 mg/kg IV over 30 minutes, then 2 mg/kg/day
    - Can use 0.5 mg/kg midazolam instead
  - Cautious use of sodium bicarbonate as it may worsen hypokalemia
  - Repletion of potassium if K ≤ 2.0 mEq/L

Call the Maryland Poison Center to report all suspected cases of chloroquine or hydroxychloroquine overdoses.

POISON Help®
1-800-222-1222