**H29. Lidocaine (Xylocaine)**

**Class and Action:** Antidysrhythmic, local anesthetic; decrease diastolic depolarization and raises Vfib threshold.

**Indications:** Ventricular tachycardia, ventricular fibrillation, wide complex tachycardia of unknown origin, significant ventricular ectopy, local anesthetic to numb site

**Contraindications:** Hypersensitivity, Adams-Stokes syndrome, 2nd or 3rd degree AV heart block.

**Side Effects:** Vertigo, confusion, vision disturbance, hypotension, cardiovascular collapse, bradycardia, altered level of consciousness, irritability, tetany, seizures.

**Drug Interactions:** Metabolic clearance may decrease in patients on beta blockers and/or with decreased liver function. Apnea period maybe prolonged if given with Succinylcholine. Cardiac depression may occur with Phenytin. Additive neurologic effects may occur with Procainamide and Tocainide.

**Onset, Duration, and Routes:** Onset is 30-90 seconds with a duration of 10-20 minutes. Routes of administration include IV, IO, or ET

**Adult Dose:**
- 2% Lidocaine: Slow IO Push 20-40 mg

**Pediatric Dose:**
- 2% Lidocaine: Slow IO Push 0.5 mg/kg, max 40 mg

**WDM EMS Protocols:**
G28. Intraosseous Insertion

**Special Considerations:**
- A bolus of Lidocaine will remain therapeutic for only 20 minutes unless a drip is administered.
- High doses of Lidocaine can be toxic producing CNS effects. Use with caution in elderly, chronically ill, or those with metabolic dysfunction.

Protocol: H29. Lidocaine

Date of Most Recent Update: 6/2020