LIDOCAINE
(XYLOCAINE)

McHenry Western Lake County
Emergency Medical Services
During this session we will discuss:
- Class
- Actions
- Indications
- Contraindications
- Dosing/Routes
- How supplied
- Precautions
- Side effects
Class

- Antiarrythmic
Cerebroprotective effect to intubation by blunting catecholemine response.

Local anesthetic; helps to decrease residual gag reflex; relieve laryngospasm.

Na+ channel blocker: Suppresses ventricular dysrhythmias by decreasing automaticity in HIS-Purkinje system

Suppresses spontaneous depolarization in ventricles, decreases velocity of impulses through the conduction system.
Indications

- DAI premed for head trauma and stroke
- IO anesthesia in responsive pts before NS infusion
- OLMC order if no IV/IO:
  - Unstable VT w/ pulse
  - VF/pulseless VT
- DAI premed: 1.5 mg/kg IVP
  - The onset of lidocaine’s action requires that the drug be given at least 2 minutes prior to the procedure.
- Peds: 1 mg/kg (max 100mg) Peaks at 5-7 min; give while preoxygenating pt
- IO line: 1 mg/kg (max 50 mg) push slowly before 20 mL NS IVP
- Unstable VT w/ pulse: If no IV/IO & ET is placed: 1 mg/kg q. 3-5 min up to 3 mg/kg ET
- PVT/VF: If no IV/IO & ET is placed: 2 mg/kg ET then 1 mg/kg q. 3-5 min up to 6 mg/kg ET.
How supplied

- 100 mg/5ml preload
Contraindications

- Allergy to amides, "caines", or local anesthetics
- Bradycardia: Wide complex or AVBs
Simultaneous use of lidocaine and Beta blockers may cause lidocaine toxicity
Hepatic or renal failure
Suspected recent use and toxic dose of cocaine
CNS: Drowsiness, disorientation, dizziness, paresthesias, slurred speech, hearing/vision impairment, ataxia.

High levels: Tremors, seizures, resp. depression or arrest, coma.

CV: ↓BP, ↓HR, dysrhythmias, wide QRS, prolonged QT, cardiac arrest. May worsen conduction disturbances & slow vent. rate.

Ref: MWLCEMS Protocol and 2000 Mosby’s Nursing Drug Reference Book
Case Study

- You are in the back of the MICU and have a severe head injury that you are going to do DAI on. What would be the correct dose for premedicating with Lidocaine?
Answer

- 1.5 mg/kg IVP
If you have inserted an IO into a conscious patient, prior to infusing the IV of normal saline, you can infuse how much lidocaine to help with the pain.
1 mg/kg (max 50 mg) push slowly before 20 ml NS IVP