

Lidocaine

<u>Name-</u>	Lidocaine, Xylocaine
<u>Class-</u>	Antidysrhythmic (class 1 B) Local anesthetic
<u>Action-</u>	Lidocaine suppresses arrhythmias dealing with depolarized tissues of the heart. It is effective in decreasing premature ventricular complexes. It is also an effective drug to treat ventricular fibrillation and ventricular tachycardia. Lidocaine is also good at increasing the ventricular threshold.
<u>Indication-</u>	Patient having runs of ventricular tachycardia or ventricular fibrillation after being defibrillated during an acute myocardial infarction. If the patient is having more than 6 unifocal premature ventricular contractions (pvc) per minute, multifocal pvc's, and couplets. Lidocaine is also indicated for prophylaxis of any arrhythmias with thrombolytic therapy.
<u>Contraindication-</u>	Hypersensitivity of drug, Adams/stokes syndrome, second and third degree heart block without and artificial pacemaker. If patient has pvc's in conjunction with bradycardia, treat bradycardia first with atropine.
<u>Precaution-</u>	Second and third degree heart block, bradycardia, hypovolemia, give slowly and with caution to patient with renal and kidney failure, CHF, decreased cardiac output, and in elderly over 70 decrease the dose by 50%.
<u>Side effects-</u>	Wide QRS interval, chest pain, difficulty breathing, confusion, lightheadedness, blurred vision, hypotension, bradycardia, altered level of consciousness, N/V and anxiety.
<u>Dose/route</u>	Cardiac arrest: (Adult) 1.0 to 1.5mg/kg iv bolus of ET (2 to 21/2x iv dose) consider repeating in 3-5 minutes. (max dose 3mg/kg). A single dose of 1.5mg/kg is acceptable. (Pediatric) 1mg/kg IV/IO/ET (diluted to 3 to 5ml) Wide complex PSVT/ Wide complex Tachycardia of unknown type/ Stable V-tach: (Adult) Initial loading dose 1.0 to 1.5mg/kg iv. If needed give 0.5 to 0.75mg/kg in 5 to 10 minutes (max dose 3mg/kg) after conversion start a Lidocaine drip (2-4mg/kg). (Pediatric) initial loading dose 1mg/kg iv/lo followed by an infusion of 20-50mcg/kg/min. Maintenance infusion drip: Dilute 2g into 500ml of D5W. Infuse at 2-4mg/min (4:1 concentration). Pediatric: Dilute 120mg in 100ml of D5W infuse at 20-50mcg/kg/hr
<u>Onset-</u>	30-90 seconds
<u>Duration-</u>	10-20 minutes

Reference

Mosby's Pharmacology in Nursing 20th edition by Mckenny and Salerno

Mosby's Paramedic Textbook Second edition by Mick J. Sanders

Brady Prehospital Emergency Pharmacology Fifth edition by Bryan E. Bledsoe, Dwayne E.

Clayden, and Frank J. Papa