Lidocaine

GENERIC NAME

Lidocaine

TRADE NAME

Xylocaine

DESCRIPTION

Lidocaine is an antiarrhythmic and local anesthetic that also helps reduce intracranial and intraocular pressures. It is commonly used for its effects on the heart's electrical conduction system and for pain management during certain medical procedures.

HOW SUPPLIED

Prefilled syringe: 100 mg/5 ml

INDICATIONS

- Ventricular fibrillation (VF)
- Head injury
- Pain prevention during intraosseous (IO) infusion
- Intubation of patients with penetrating eye injury

CONTRAINDICATIONS

- Allergy or hypersensitivity to Lidocaine
- Usually contraindicated in second-degree Mobitz II and third-degree heart blocks

MECHANISM OF ACTION

1. Suppresses ectopic ventricular activity by decreasing the excitability of the heart and its electrical conduction system, preventing premature ventricular contractions from inducing ventricular fibrillation.
2. Suppresses ventricular tachycardia (VT) and ventricular fibrillation (VF).
3. Decreases intracranial pressure during intubation.

SIDE EFFECTS

- Drowsiness
- Seizures
- Confusion
- Hypotension
- Bradycardia
- Heart blocks
- Nausea
- Vomiting
- Respiratory and cardiac arrest

AUTHORIZATION

EMT: Not authorized

AEMT: Not authorized

Paramedic: Standing order

DOSAGE

IO Insertion (for pain control prior to infusion)

- **Adult:** 50 mg
- **Pediatric:** 0.5 mg/kg

Cardiac Arrest (with VF/VT)

- **Adult:** 1.5 mg/kg IV/IO for the first dose. Subsequent doses: 0.5 mg/kg IV/IO every 3–5 minutes, up to a maximum of 3 mg/kg.
- **Pediatric:** 1 mg/kg IV/IO every 5 minutes, up to a maximum of 3 mg/kg.

Head/Spinal Cord Injury (head-injured patients requiring intubation)

- **All patients:** 1 mg/kg IV/IO push prior to intubation, if available

Tachycardia: Wide Complex - No Pulse

- **Adult:** 1 mg/kg IV/IO push every 5 minutes, up to a maximum of 3 mg/kg.

Tachycardia: Wide Complex with Pulse

- **Adult:** 1 mg/kg IV/IO push every 5 minutes, up to a maximum of 3 mg/kg.