LIDOCAINE (Xylocaine®)

Classification: Antidysrhythmic agent

Action: Suppresses ventricular ectopy by stabilizing the myocardial cell membrane.

Indications:
1. Cardiac arrest with ventricular fibrillation or pulseless ventricular tachycardia
2. Post conversion or defibrillation of ventricular rhythms with base contact.
3. Ventricular tachycardia with pulse present
4. Symptomatic/malignant ventricular ectopy

Contraindications:
1. 2° degree type II heart block
2. 3° degree heart block
3. Junctional bradycardia
4. Ventricular ectopy associated with bradycardia
5. Idioventricular rhythm
6. Known allergy to Lidocaine or sensitivity to other anesthetics (report to base).

Adverse Effects:

<table>
<thead>
<tr>
<th>Cardiovascular</th>
<th>Neurological</th>
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<tbody>
<tr>
<td>Bradycardia</td>
<td>Dizziness</td>
</tr>
<tr>
<td>Hypotension</td>
<td>Drowsiness</td>
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<tr>
<td>Arrest</td>
<td>Paresthesia</td>
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<tr>
<td>Blurred vision</td>
<td>Restlessness</td>
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<tr>
<td></td>
<td>Slurred speech</td>
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<table>
<thead>
<tr>
<th>Respiratory</th>
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<tbody>
<tr>
<td>Dyspnea</td>
<td>Disorientation</td>
</tr>
<tr>
<td>Depression</td>
<td>Seizures</td>
</tr>
<tr>
<td>Apnea</td>
<td>Lightheadedness</td>
</tr>
<tr>
<td></td>
<td>Tinnitus</td>
</tr>
</tbody>
</table>

Gastrointestinal
Nausea/vomiting

Administration:

**ADULT DOSE**
1. **V-Fib/pulseless V-Tach**: 1.5 mg/kg IVP/IO, repeat every 3-5 minutes, not to exceed 3 mg/kg
2. **V-Tach with a pulse**: 1.5 mg/kg IVP, may repeat with 0.75 mg/kg IVP every 5-10 minutes, not to exceed 3 mg/kg

**PEDIATRIC DOSE**
1. **V-Fib/pulseless V-Tach**: 1 mg/kg IVP/IO. May repeat in 10-15 minutes, not to exceed 100 mg
2. **V-Tach with a pulse**: 1 mg/kg IVP/IO, may repeat with 0.5 mg/kg IVP/IO every 5-10 minutes, not to exceed 100 mg
LIDOCAINE (Xylocaine®)—continued

Onset:  30 - 90 seconds

Duration:  10 - 20 minutes

Notes:

- In cases of premature ventricular contractions, assess need and treat underlying cause. Needs include: chest pain, syncope, R on T situations, multifocal and paired PVCs, bigeminy and trigeminy, and PVCs at 6-12 per minute. See appropriate protocols as needed.

- Lidocaine is to be administered no faster than 50mg/min, except in patients in cardiac arrest.