

LIDOCAINE HYDROCHLORIDE (previously known as Lignocaine)

Trade Name	Lidocaine-Baxter® (Baxter Healthcare)
Class	Local anaesthetic (also a class IB antiarrhythmic)
Mechanism of Action	Blocks initiation and conduction of nerve impulses by decreasing the neuronal membrane's permeability to sodium ions.
Indications	Local infiltration prior for certain painful procedures eg: lumbar puncture, chest drain insertion, arterial stab, peripheral arterial line
Contraindications	Hypovolaemia, heart block Use cautiously in patients with cardiac or hepatic impairment Avoid application to middle ear as can cause ototoxicity
Supplied As	Lidocaine clear solution 1% in a 5mL glass ampoule
Dilution	Not required
Dosage	Use a dose of up to 3 mg/kg = 0.3 mL/kg of 1% solution Repeated not more often than every 4 hours
Interval	Once every 4 hours
Route	Subcutaneous
Administration	Subcutaneous bleb under the skin
Compatible With	5% and 10% glucose, 0.9% and 0.45% sodium chloride, Lactated Ringers
Incompatible With	N/A
Interactions	Concurrent treatment with beta-blockers eg sotalol, propranolol may increase risk of cardiac toxicity.
Monitoring	If infants receive repeated dosing with lidocaine ECG monitoring is advised. If methaemoglobinaemia is suspected, monitor both pulse oximetry and arterial blood sample
Stability	Discard any remaining solution immediately after use
Storage	Unopened vials should be stored at room temperature. Manufacturer's expiry.
Adverse Reactions	Arrhythmias, heart block, cardiovascular collapse, respiratory depression, lethargy, agitation, seizures, nausea, vomiting, muscle twitching, thrombophlebitis.

Metabolism	90% metabolised by the liver, half life in adults is 7 to 30 min but prolonged up to >3 hours in premature infants.
Comments	Also known as Lignocaine
References	<ol style="list-style-type: none">1. www.medsafe.govt.nz/profs/Datasheet2. BNF for Children 20073. Neonatal Formulary – The Northern Neonatal Network eds 3rd Edition 2000.4. www.nzf.org.nz5. www.medsafe.govt.prof/PUArticles/methaemoglobinaemia
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