

Medication: Lidocaine (Airway)	PDN: 6948.07	Last Updated: August 21 2025	PMD: Andrew Travers*	PDC: Tanya Fraser*	Page 1 of 2
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LIDOCAINE (Airway)

1.0 Classification

- Local anaesthetic

2.0 Mechanism of Action

- Inhibits sodium ion permeability resulting in inhibition of depolarization and blockade of nerve conduction in the area where the medication has been absorbed.

3.0 Indications

- To assist with ETI when airway reflexes are intact

4.0 Contraindications

- Known hypersensitivity
- Patients with congenital or idiopathic methemoglobinemia

5.0 Precautions

- Use with extreme caution with children 2 years of age or less

6.0 Route

- Topical

7.0 Dosage

Adult

- 5% ointment: no more than 2 g of ointment (100 mg lidocaine) per dose. Approximately 1 inch of ointment is equivalent to 1 g. The maximum daily dose is 20 g of ointment (1000 mg lidocaine).
- Lidocaine spray: maximum dose 400 mg (each spray is 12 mg).

Children (2-11 years old)

- 5% ointment: no more than 5 mg/kg of lidocaine (which is equivalent to 0.1 g/kg of ointment). No more than 1 inch of ointment per 10 kg.
- Lidocaine spray: maximum dose 3 mg/kg (each spray is 12 mg).

Application for Management of Airway Reflexes

- Apply 5% ointment (not to exceed the dosing listed above) to the posterior third of the tongue with a tongue depressor and allow it to melt.
- At least two minutes after application of 5% ointment, use a tongue depressor to spray anatomy like the soft palate, posterior pharynx, tonsillar pillars, and hypopharynx with Lidocaine spray.
- This will generally allow for ETI; however, a laryngoscope blade may be used to spray deeper anatomy like the epiglottis or glottic opening.

8.0 Supplied

- Lidocaine 5% ointment 35 g
- Lidocaine Hydrochloride Spray 12 mg/dose, 250 metered doses

9.0 May Be Given By

- To aid with ETI: PCP with additional approved activities/ACP/CCP

10.0 Adverse effects

- Seizures
- Hypotension
- Bradycardia
- Vomiting
- Dizziness
- Arrhythmia

11.0 Special notes

- Application of topical lidocaine often requires coaching of the patient, as losing the sensation of swallowing can be anxiety-inducing.
- When lidocaine 5% ointment is used concomitantly with other products containing lidocaine, the total dose contributed by all formulations must be kept in mind.
- Absorption is variable, especially below the vocal cords, which may result in excessive plasma concentrations.
- Pregnancy category B [if there is a clinical need for it, Category B drugs are considered safe to use]

12.0 References

- Adult Airway Management Clinical Practice Guideline
- Airway Interventions and Management in Emergencies (AIME)
- Compendium of Pharmaceuticals and Specialties (CPS)

*Electronically Signed

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