Intraoral Use of EMLA Cream for Fiberoptic Intubation

Awake, fiberoptic intubation is a valuable approach to the difficult airway in the ED, but topical anesthesia can be difficult to achieve. Researchers in New Jersey studied the use of EMLA cream (a topical local anesthetic mixture of lidocaine and prilocaine) on 20 patients scheduled for elective anesthesia. The manufacturer of EMLA provided partial support for the study.

Each patient was pretreated with 0.2 to 0.4 mg of glycopyrrolate and 2 mg of midazolam. Then, a maximum of 4 g of EMLA was placed on the tongue, soft palate, uvula, tonsillar pillars, and posterior oropharynx with a tongue depressor and soft-tipped applicator. All patients attained satisfactory local anesthesia (average time, 11+/−6 minutes), and all were intubated successfully without rescue topical anesthesia. Plasma levels of prilocaine and lidocaine did not reach toxic levels in any patient, and methemoglobin levels were less than 1.5 percent (normal) in all patients.

Comment: This small study shows that EMLA cream is a reasonable method of topical anesthesia for fiberoptic intubation, although the average time to attain anesthesia was a little long for many ED applications. The study also reaffirms the safety of EMLA when applied to the tongue and oral mucosa in the dosage range used, making it a potentially wonderful alternative for difficult intraoral wounds in both adults and children. More information is needed about plasma anesthetic levels in children before pediatric mucous membrane application can be recommended.

— RM Walls

Published in Journal Watch Emergency Medicine November 15, 2000

CITATION(S):