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Block 6

A Non-inferiority Randomized Controlled Trial Comparing the Clinical Effectiveness of Anesthesia Obtained by Application of a Novel Topical Anesthetic Putty with the Infiltration of Lidocaine for the Treatment of Lacerations in the Emergency Department: Annals of Emergency Medicine, Volume 63, issue 6 (June, 2014), p. 704-710. Jenkins, Murphy, Little, McDonald, McCarron

Objective: To test the hypothesis that anesthesia from topical anesthetic putty is non-inferior to that provided by conventional lidocaine infiltration for laceration repairs

Methods: Randomized Controlled Trial. Participants randomly assigned to receive either infiltration anesthesia or topical anesthesia putty. Pain scores recorded 15 minutes after infiltration and 30 minutes after topical anesthetic putty application. Wound evaluation scores conducted 7-10 days after. Adverse events were monitored.

Results: 110 participants: 56 received infiltration, 54 received topical anesthetic putty. Median difference between pain scores of the 2 groups was 0 (95% confidence interval -1 to 0). No substantial differences between 2 groups in terms of either wound evaluation scores or adverse events.

Conclusion: Novel topical anesthetic putty was not inferior to infiltration with lidocaine with respect to pain experienced during suturing, and putty is a feasible alternative to infiltration anesthesia of lacerations.

Limitations: Only studied in ages 18 and over. This method of anesthesia would be helpful in children less than 18 years old. The study was also not able to be blinded. It was also a small study with only 110 participants. Future study with more participants and wound healing would be beneficial.