



We conducted a randomized, double-blinded, placebo-controlled trial in seventeen healthy adults who received an i.v. cannulation in the right and left elbow, respectively, where the order of application of 60 mg lidocaine spray (Xylocaine 10% pump spray) or placebo spray (chlorhexidine gluconate 0.5% in 70% alcohol base) before i.v. cannulation was randomized” Datema et al (2017).

Abstract:

OBJECTIVES: Lidocaine spray is an effective analgesic of mucous membranes. Lidocaine spray is also used during intravenous (i.v.) cannulation, especially in children. However, the analgesic effect of lidocaine spray during i.v. cannulation has not been studied. We aimed to assess the analgesic effectiveness of lidocaine spray during i.v. cannulation.

METHODS: We conducted a randomized, double-blinded, placebo-controlled trial in seventeen healthy adults who received an i.v. cannulation in the right and left elbow, respectively, where the order of application of 60 mg lidocaine spray (Xylocaine 10% pump spray) or placebo spray (chlorhexidine gluconate 0.5% in 70% alcohol base) before i.v. cannulation was randomized. Thus, each participant had an i.v. cannulation in both arms: one with lidocaine spray and the other with placebo spray. The primary outcome was pain intensity assessed by a 100 mm Visual Analogue Scale. The secondary outcomes were adverse events, success rate of i.v. cannulation and the degree of difficulty of i.v. cannulation as estimated by the nurse

performing the i.v cannulation.

ReTweet if useful... What is the effect of lidocaine spray prior to intravenous cannulation?

[@ivteam #ivteam](https://ctt.ec/3O17Y+)

Click To Tweet

RESULTS: The pain score (Visual Analogue Scale) during i.v. cannulation was 18.0 mm (interquartile range: 5.0-34.5 mm) after lidocaine application and 21.0 mm (interquartile range: 11.0-30.5) after placebo application. These scores were not significantly different (95% confidence interval: -9.0-11.0, P=0.698). No adverse events occurred and all i.v. cannulations were successful at first attempt.

CONCLUSION: Local administration of lidocaine is not effective in reducing pain during i.v. cannulation.

Reference:

Datema, J., Veldhuis, J. and Bekhof, J. (2017) Lidocaine spray as a local analgesic for intravenous cannulation: a randomized clinical trial. European Journal of Emergency Medicine. August 10th. .

doi: 10.1097/MEJ.0000000000000496.

Thank you to our partners for supporting IVTEAM

