

This study examined how many needle procedures were successful at the first attempt when children received either a warm lidocaine and tetracaine patch or an eutectic mixture of lidocaine and prilocaine (EMLA) cream” Cozzi et al (2017).

Abstract:

AIM: More than 50% of children report apian during venipuncture or intravenous cannulation and using local anaesthetics before needle procedures can lead to different success rates. This study examined how many needle procedures were successful at the first attempt when children received either a warm lidocaine and tetracaine patch or an eutectic mixture of lidocaine and prilocaine (EMLA) cream.

ReTweet if useful... First time success with needle procedures with local anaesthetic creams
[@ivteam #ivteam](https://ctt.ec/U9105+)

METHODS: We conducted this multicentre randomised controlled trial at three tertiary-level children’s hospitals in Italy in 2015. Children aged 3-10 years were enrolled in an emergency department, paediatric day hospital and paediatric ward and randomly allocated to receive a warm lidocaine and tetracaine patch or EMLA cream. The primary outcome was the success rate at the first attempt.

RESULTS: The analysis included 172 children who received a warm lidocaine and tetracaine patch and 167 who received an EMLA cream. The needle procedure was successful at the first attempt in 158 children (92.4%) who received the warm patch and in 142 children (85.0%) who received the cream ($p=0.03$). The pain scores were similar in both groups.

CONCLUSION: This study showed that the first-time needle procedure success was 7.4% higher in children receiving a warm lidocaine and tetracaine patch than EMLA cream.

Reference:

Cozzi, G., Borrrometi, F., Benini, F., Neri, E., Rusalen, F., Celentano, L., Zanon, D., Schreiber, S., Ronfani, L. and Barbi, E. (2017) First time success with needle procedures was higher with a warm lidocaine and tetracaine patch than an eutectic mixture of lidocaine and prilocaine cream. *Acta Paediatrica*. January 27th. .



First time success with needle procedures with local anaesthetic
creams | 2

Thank you to our partners for supporting IVTEAM