
Abstract:

OBJECTIVE: To examine the efficacy and safety of a new topical anesthetic containing a disinfection ingredient (LidoDin cream) in reducing the pain associated with venipuncture by comparing it with the proven eutectic mixture of lidocaine 2.5% and prilocaine 2.5% (EMLA cream).

METHODS: A single-blind, randomized, controlled trial was conducted on a study population consisting of a convenience sample of patients aged 12 to 16 years who presented at our Emergency Department between November 2007 and April 2008. The Visual Analog Scale (VAS) was used for pain assessment. Before the study, the bactericidal effect of the LidoDin cream on skin flora was tested.

RESULTS: Twenty patients were enrolled to each arm of the study. Mean patient age was 13.6 years for the LidoDin group and 14.12 years for the EMLA group (P=0.347). Male patients accounted for 55% of the patients in the LidoDin group, compared with 40% in the EMLA group (P=0.527). Skin reaction scores of the LidoDin group for erythema and edema were not statistically different than those of the EMLA group (P=0.73 and P=0.75, respectively). Patient VAS scores and nurse VAS scores of the LidoDin group were not statistically different than those of the EMLA group (P=0.57 and P=0.93, respectively).

DISCUSSION: This pilot study demonstrated that LidoDin and EMLA seem to be equally safe and effective topical anesthetics for venipuncture. Future studies are planned to determine, if LidoDin reduces the rate of local skin infection in patients treated with multiple daily subcutaneous injections of medications.