“The objective of this study was to investigate the efficacy of this device on pain during and after venipuncture procedures in infants.” Secil et al (2014).

Reference:


Efficacy of vibration on infant venipuncture pain scores http://ctt.ec/38FN0+ @ivteam
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Abstract:

OBJECTIVE: Venipuncture is a frequent source of painful procedures for infants. It has been well documented that infants react to pain with a combination of physiologic and behavioral responses. Infants are unable to describe pain and at particularly high risk for inadequate pain management. The Vibration Anesthesia Device is a specifically designed device for management of pain from minor procedures. It has been shown to reduce venipuncture pain in older children but has not been studied in infants. The mechanism of its effects has been described by a gate control theory, which states that vibration stimulates the dorsal horn neurons where the pain signal is being modulated. The objective of this study was to investigate the efficacy of this device on pain during and after venipuncture procedures in infants.

METHODS: Study participants were 60 healthy infants undergoing venipuncture procedure for routine laboratory tests. Infants were divided into 2 groups as follows: group 1 (n = 30) was placed vibration anesthesia device 5 to 10 cm proximally through the site of venipuncture, and group 2 (n = 30) underwent venipuncture only. A single observer rated pain responses using the Face, Legs, Activity, Cry, and Consolability scale before, during, and after the procedure. The χ distribution and Student t test were used for statistical analysis.

RESULTS: Groups did not differ by sex. Mean age of group 2 is less than group 1 and is statistically significant (P = 0.026). There were no differences between pain scores of groups assessed by Face, Legs, Activity, Cry, and Consolability scale before, during, and after venipuncture procedure (P = 0.359, P = 0.907, and P = 0.400 respectively).
CONCLUSIONS: We assessed the efficacy of a vibration anesthesia device, and our results suggested that this device did not reduce pain scores in infants during and after venipuncture procedure.

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