

This study aims to evaluate the role of 3 different nonpharmacological measures such as Valsalva maneuver, flash of light, and distraction method in attenuation of pain during venous cannulation” Shivashankar et al (2018).

Abstract:

BACKGROUND: Establishing an intravenous access is indispensable for safe administration of anesthesia. Most of the times, it is executed without any analgesia although the pain associated with this procedure is quite agonizing to the patients.

AIMS: This study aims to evaluate the role of 3 different nonpharmacological measures such as Valsalva maneuver, flash of light, and distraction method in attenuation of pain during venous cannulation.

DESIGN: A clinical randomized controlled study.

MATERIALS AND METHODS: Two hundred patients of either sex, aged between 18 and 65 years, posted for elective surgery were enrolled in this study. Patients were randomly allocated into four groups, Group C-control, Group V (Valsalva) - blew into sphygmomanometer raising the mercury column up to 30 mm of Hg, Group D (distraction) - pressed a rubber ball and Group L (light) - photographed with a flash of light before venous cannulation. During the process of cannulation, patients were observed and questioned, and pain was graded using a 4- point scale. After the cannulation, pain during the procedure was also assessed using visual analog scale (VAS) score. Data analysis was done using SPSS statistical package version 17.

RESULTS: A significant reduction in the incidence of pain was noted in distraction group 36% as compared to 44% in Group L, 46% in Group V, and 100% in the control group. The severity of pain as assessed by 4-point score was significantly lowest in Group D (0.26 ± 0.53) as compared to other three groups (Group V and L = 0.54 ± 0.16 , Group C = 1.64 ± 0.6 , $P < 0.001$). Mean VAS score was significantly low in Group D (0.6 ± 1.11) and Group L (0.54 ± 1.06) as compared to Group V (1.26 ± 1.76) and Group C (5.0 ± 1.21 , $P < 0.001$).

CONCLUSION: We conclude that distraction can be considered as a diligent, reasonable, and simple method to attenuate procedural pain during peripheral venous cannulation.

Reference:

Shivashankar, A., Nalini, K.B. and Rath, P. (2018) The Role of Nonpharmacological Methods in Attenuation of Pain Due to Peripheral Venous Cannulation: A Randomized Controlled Study. *Anesthesia, Essays and Researches*. 12(1), p.7-10.

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