

Efficacy of Eutectic Mixture of Local Anaesthetics and Diclofenac Spray in Attenuating Intravenous Cannulation Pain- Paeallel Randomized Trial

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Abstract : Method- A total of 300 patients were studied, with 100 patients in each group. Patients aged 16-60 years, ASA grade I and II undergoing elective general surgical, urology and orthopedic procedures were included in the study. The patients were randomly allocated to any of the three groups by Using Sealed envelopes. 1. Group A: EMLA (eutectic mixture of 2.5% lidocaine with 2.5% prilocaine) - Patients receiving eutectic Lidocaine/ Prilocaine cream (2gm/10cm²) of Prilox cream), for 60- 70 min under occlusive dressing. 2. Group B - Patients receiving topical diclofenac 4 % spray gel for 60- 70 min, covering an absorption area of 50 cm² 3. Group C: control - Direct cannulation was done without any intervention. Results - Group B showed significantly least number of patients complaining pain on IV cannulation in comparison to group A and group C. The Mean VAS scores were found to be maximum in GROUP C: control- 8.76 ± 4.14 , then in GROUP A: EMLA- 2.54 ± 4.21 .and least in GROUP B: Diclofenac 4% spray- 1.13 ± 3.05 . Erythema, induration and edema were significantly reported to be higher for the control group. Also group A patients reported adverse skin reactions more than patients in group B. Conclusion - It can be concluded that diclofenac spray 4 % and EMLA cream are effective in reducing the incidence and severity of venous cannulation pain as compared to the control group. However, a higher incidence of skin blanching, erythema, and oedema associated with EMLA cream and a lower incidence of these adverse effects favours the use of diclofenac spray 4%. They are promising agents for the treatment of venous cannulation pain.

Keywords : diclofenac spray, EMLA, intravenous, pain

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