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SOUVENIR
To Evaluate The Efficacy Of Heparin Sodium Topical Solution In Prevention Of Intravenous Cannula Related Thrombophlebitis

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Background: Peripheral infusion related thrombophlebitis has documented incidence of 25-35% in hospitalized patients, making it a commonly encountered complication. Recently a heparin sodium topical solution with quick penetration (QPS) property has been introduced. In this prospective randomised study, we aimed to evaluate the efficacy of heparin sodium topical solution.

Method: 40 ASA grade I adult patients admitted for routine surgery were included in the study. They were randomly allocated in one of the two groups of 20 each. Group I = did not receive application of any topical solution/gel, Group II = heparin sodium topical QPS (1000 IU/ml) was applied around intravenous cannula insertion site immediately after cannulation and thrice daily thereafter for a period of 48 hrs. The efficacy was assessed on the basis of Phlebitis scale.

Results: In Group I, 12 patients had early signs, 6 patients had medium stage and 2 patients had advanced stage (pain, induration, erythema) of phlebitis. While, in Group II, 15 patients had first sign (mild pain, redness), 3 patients had early signs and 2 patients had no sign of phlebitis.

Conclusion: Our study showed relatively less frequent occurrence and milder severity of catheter related phlebitis when topical QPS of heparin is applied on insertion site of cannula. Since we had a small study population further large cohort clinical studies are warranted.