The association of superficial thrombophlebitis (ST) with deep-venous thrombosis varies between 6% and 44%. Thus, prevention of ST is important. The aim of this study was to compare the efficacy of topical quick penetrating solution (QPS) of heparin 1000 IU/mL versus diclofenac QPS for prevention of postinfusion ST, as per khileshwar and Singh (2019).

Abstract:

BACKGROUND AND AIMS: The association of superficial thrombophlebitis (ST) with deep-venous thrombosis varies between 6% and 44%. Thus, prevention of ST is important. The aim of this study was to compare the efficacy of topical quick penetrating solution (QPS) of heparin 1000 IU/mL versus diclofenac QPS for prevention of postinfusion ST.

SETTINGS AND DESIGN: This is a randomized, controlled, double-blind study.

MATERIALS AND METHODS: The study was done after ethical clearance and Clinical Trial Registry- India registration to compare 100 patients for the prevention of ST with application of heparin QPS and diclofenac QPS at regular intervals. Patients were randomized into two groups (Group H - heparin QPS group and Group D - diclofenac QPS group) and the assigned treatment was applied four times daily. The appearance of thrombophlebitis was graded on the basis of infusion nursing society scale. The site of venous cannulation was inspected.
every 6 h for any changes for the next 5 days.

STATISTICAL ANALYSIS: The parametric data were analyzed using Student’s t-test and nonparametric data were analyzed by Kruskal-Wallis test.

RESULTS: Of 98, only 10 patients developed thrombophlebitis and all belonged to Group D (23%). No patient belonging to Group H developed thrombophlebitis (0%). This difference was statistically significant (P = 0.034).

CONCLUSION: The QPS formulation of heparine and diclofenac was effective in preventing thrombophlebitis. Heparine QPS is more effective than diclofenac QPS for the same.

You may also be interested in...

Use of infrared thermography in the detection of infusion phlebitis
Factors contributing to infusion phlebitis among adult patients
Infusion phlebitis signs and symptoms associated with peripheral IV catheters

Reference: