Effectiveness of glycerine magnesium sulphate versus topical heparin application in patients with peripheral intravenous cannula induced phlebitis

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Abstract

Introduction: Peripheral intravenous cannula induced phlebitis is a common and significant problem in clinical practice. Objectives To compare the effectiveness of glycerine magnesium sulphate and topical heparin application and to find the association between the pre-test Visual Infusion Phlebitis (VIP) scores and selected demographic variables. Method: Quasi experimental with two group pre-test post-test design was used. This study was conducted in Bishop Benziger Hospital, Kerala for one month. Using purposive sampling technique 60 patients were selected and assigned randomly into glycerine magnesium sulphate group and heparin group. In glycerine magnesium sulphate group, glycerine magnesium sulphate paste and in heparin group topical heparin was applied over the site of phlebitis every eighth hourly for five days. VIP score was used to assess the pre-test and post-test score of both groups. Results: The findings revealed that both groups had a significant difference between the pre-test and post-test VIP score on the first, third and fifth day (p=.001). The study shows that there was a significant difference between the median post test score of glycerine magnesium sulphate group and heparin group on the third day (p=.0366) and fifth day (p value = .001). The study also shows that there was no significant association between pre-test VIP score and demographic variables. Conclusion: The study concluded that glycerine magnesium sulphate was more effective than topical heparin application in reducing the severity in patients with peripheral intravenous cannula induced phlebitis.

Keywords: Glycerine Magnesium Sulphate; Topical Heparin; Peripheral Intravenous CannulaInduced Phlebitis.

References

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