A Comparison of pharmacologic and mechanical prophylaxis on the prevention of deep vein thrombosis in spinal cord injury

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Introduction: Deep vein thrombosis is one of the most important complications in patients with spinal cord injury. This study compares the effects of mechanical prophylaxis with or without pharmacological prophylaxis on prevention of deep vein thrombosis in patients with spinal cord injury.

Methods: We conducted a double blind clinical trial study with 75 cases. These patients were divided to three groups that were matched by age and gender. The first group received, compressive stocking with prophylactic dose Enoxaparin. The second group received, compressive stocking with prophylactic dose Heparin. The third group received only compressive stocking. Finally, data were collected by checklists and were analyzed by SPSS (ver 19).

Results: The incidence rate of deep vein thrombosis during hospitalization for the first group (12%), second group (4%), and third group (4%) was calculated. However, no statistical differences between the results of these groups were seen. (p = 0.424)

Discussion: Based on the results of our study, the rate of deep vein thrombosis incidences were lower than for other studies. We did not see any preferences between pharmacologic prophylaxis and mechanical methods on deep vein thrombosis.

Keywords: Spinal cord injury, deep vein thrombosis, enoxaparin, heparin, compressive stocking