Abstract

Original Article

The Development of Phlebitis and Infiltration in Patients with Peripheral Intravenous Catheters in the Neurosurgery Clinic and Affecting Factors

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Abstract

Aims and objectives: The aim of the present study was to investigate the development of phlebitis and infiltration in patients with peripheral intravenous catheters in the neurosurgery clinic and affecting factors.

Background: IV catheter complications prolong the length of hospital stay of patients, cause patients to undergo unnecessary diagnostic procedures and treatments, expose patients and their relatives to stress, increase workload of medical staff and lead to economic losses.

Design: Descriptive and cross-sectional study.

Methods: The sample of the study consisted of 325 patients over the age of 18 who received drug and fluid therapy through peripheral catheter and 347 catheters. The study data were collected by examining the catheter insertion site in terms of phlebitis and infiltration findings every 24 hours using the survey and observation forms.

Results: Phlebitis development rate was found to be 17.6%. All of the phlebitis cases (100%) were Grade 1 and most phlebitis cases occurred on the second day (60%). Infiltration development rate was 6.3%. All of the phlebitis cases (100%) were Grade 1 and most infiltration cases occurred on the second day (81.8%).

Conclusions: Phlebitis and infiltration cases were mostly seen on the second day, and phlebitis occurred mostly in patients with cranial diseases, when catheter site was used multiple times, when catheter dwelt in vain for 49-72 hours and when catheter was inserted by a nurse with a bachelor's degree. It was identified that infiltration was mostly seen in patients between the ages of 50-59 and in catheterizations in the operating room.

Key words: Infiltration, Neurosurgery, Peripheral intravenous catheters, Phlebitis