The purpose of this study was to compare field-start PIV catheter dwell time of 2 days or less versus field-start PIV catheter dwell time of more than 2 days for the development of indicators of infection for geriatric blunt trauma patients” Day and Conde (2018).

Abstract:

Replacement time for peripheral intravenous (PIV) catheters started in the field is unclear. The purpose of this study was to compare field-start PIV catheter dwell time of 2 days or less versus field-start PIV catheter dwell time of more than 2 days for the development of indicators of infection for geriatric blunt trauma patients. A retrospective case series was conducted at the state-designated trauma referral center. Activated trauma team patients with blunt injury were included if 65 years or older and if admitted from the field for 7 days or more with a PIV catheter placed prehospital. Presence of fever, abnormal white blood cell (WBC) count, and a positive Quick Sequential Organ Failure Assessment (qSOFA) score as recommended by the Surviving Sepsis Campaign were used to describe potential infection and were analyzed in relation to PIV catheter dwell time with statistical significance set at p < .05. Forty-two patients (28%) had PIV catheter dwell time of 2 days or less, and 108 (72%) had PIV catheter dwell time of more than 2 days. At dwell time of more than 2 days, a statistically significant smaller percentage of patients demonstrated positive qSOFA score (p = .005) and fever (p = .003) and approached statistical significance for abnormal WBC count (p = .05). Dwell time of more than 2 days for field-start PIV catheters did not lead to an
increase in fevers, abnormal WBC count, or positive qSOFA scores. These data support consideration of longer dwell time for PIV catheters initiated in the field for geriatric blunt trauma patients. Further studies are needed.

Reference:


doi: 10.1097/JTN.0000000000000362.