The aim of this study was to examine levels I and II evidence to determine if replacing peripheral intravenous catheters only when clinically indicated compared to every 72-96 hr increases the adult patient's risk for infection or phlebitis" Morrison and Holt (2015).

Abstract:

BACKGROUND: Current clinical guidelines from the Centers for Disease Control and Prevention (CDC; 2011) state that peripheral intravenous catheters are to be replaced every 72-96 hr to prevent infection and phlebitis in the adult patient. It is unclear whether this practice reduces the incidence of phlebitis or other infections.

AIM: The aim of this study was to examine levels I and II evidence to determine if replacing peripheral intravenous catheters only when clinically indicated compared to every 72-96 hr increases the adult patient's risk for infection or phlebitis.

METHODS: The following patient or population, intervention, comparison, outcome question was used to search the literature databases PubMed, ClinicalKey, ProQuest, Ovid SP, and CINAHL: In the adult patient requiring a peripheral vascular catheter (P), does replacing the catheter only when clinically indicated (I) compared to replacing the catheter every 72-96 hr (C) increase the occurrence of phlebitis and infection (O)? A set of specific search criteria along with critical appraisal tools was used to identify relative studies.

RESULTS: Four level II randomized controlled trials with no less than 155 subjects, and two level I meta-analyses reviewing a total of 13 research studies indicated that the replacement of peripheral intravenous catheters only when clinically indicated does not increase patient risk of phlebitis or infection when compared to the current practice of routine replacement between 72 and 96 hr in the adult patient population.

LINKING EVIDENCE TO ACTION: The current practice of replacing peripheral intravenous catheters every 72-96 hr does not decrease the incidence of phlebitis or infection when compared to replacing catheters when clinically indicated in the adult population. By translating this research into current practice, healthcare costs and nursing care time will decrease, and unnecessary invasive procedures would be eliminated thereby increasing patient safety and satisfaction.

Reference:

Morrison, K. and Holt, K.E. (2015) The Effectiveness of Clinically Indicated Replacement of Peripheral Intravenous Catheters: An Evidence Review With Implications for Clinical Practice. Worldviews on Evidence-Based Nursing. 12(4), p.187-98.

Thank you to our partners for supporting IVTEAM