The purpose of this study was to investigate the safety of clinically indicated peripheral intravenous catheters (PIVC) replacement intervals” Xu et al (2017).

Abstract:

AIM: The purpose of this study was to investigate the safety of clinically indicated peripheral intravenous catheters (PIVC) replacement intervals.

BACKGROUND: Peripheral intravenous catheters are used internationally, including in China where PIVCs are routinely replaced every 72 to 96 hours. Despite some recent international evidence showing such routine replacement is unnecessary, developing countries such as China have no supporting data.

METHOD: This cluster-randomized trial was conducted between December 2 and December 31, 2013, in 10 internal medicine wards and 10 surgery wards at a tertiary referral teaching hospital in Xiamen, China. Patients were randomly divided into an experimental group (PIVCs were replaced only when clinical indications appeared) and a control group (PIVCs were routinely changed every 72-96 hours). Per-protocol analysis and intention-to-treat analysis were used to analyse the data. Primary end point was the incidence of phlebitis.

RESULTS: This study analysed the data of 1198 patients (553 patients in the experimental group and 645 patients in the control group). There were no catheter-related bloodstream infections or local infections in the 2 groups. The 2 groups showed no statistically significant differences in the incidence of phlebitis, catheter occlusion, infiltration, and accidental removal.

CONCLUSIONS: Clinically indicated PIVC replacement is feasible, and it may reduce nursing staff workload and patient discomfort.

Reference:


Thank you to our partners for supporting IVTEAM