This study aimed to assess the risk factors for PIVC phlebitis in adults and provide a basis for indwelling time decisions” Zhu et al (2016).

Abstract:

Peripheral intravenous catheters (PIVC) are widely used in clinical nursing, but indwelling time remains a subject of debate. This study aimed to assess the risk factors for PIVC phlebitis in adults and provide a basis for indwelling time decisions.

A total of 189 first-time PIVC patients in the emergency ward were assessed between May and October 2015. Data were retrieved for patient characteristics and PIVC assessment records. This study showed that over two-thirds (67.72%) of PIVCs were removed because of phlebitis, including oedema (37.57%), rubefaction (33.33%), pain (32.28%), slow infusion speed (13.23%) and accidental extrusion (2.12%). PIVC indwelling time in the planned removal group was higher than that obtained for the unplanned removal group: 152.42 (74.58) vs. 94.64 (50.15) h, P < 0.001. At indwelling times > 96 h, 28.57% (n = 54) of catheters caused phlebitis, although 23.28% (n = 44) showed no phlebitis. PIVC phlebitis was associated with treatment with compound amino acid infusion (OR: 2.624), site at the elbow.
joint (OR: 3.049), haemoglobin level (OR: 2.492), white cell count (OR: 2.196) and catheter size (OR: 1.837). Study findings suggest that PIVC might be used for longer durations based on nursing assessments and health education.

Reference:


Thank you to our partners for supporting IVTEAM