Improving peripheral IV cannulation

Abstract:

Unplanned recannulations are a common occurrence in numerous hospitals within the United Kingdom and worldwide (Jackson, 2007; Schwengel 2004). In May 2008 the Clinical Nurse Specialist in IV Therapy at BSUH NHS Trust initiated a clinical audit to assess IV practice and determine the impact of recannulations within the NHS trust. The audit, which was initially carried out on 1000 sequential cannula insertions and is currently still on-going, showed that 69.2% of the cannulas failed well before the routine change of 72 hours and that 36.3% were removed because they had infiltrated. With the aim of reducing these numbers of unscheduled recannulations, the Nurse Specialist initiated a real-time, prospective clinical evaluation of a new cannula stabilisation device at Brighton and Sussex University Hospital NHS Trust (BSUH). This assessed the impact of the device alongside the currently used securement strategy (IV dressing) on unscheduled IV restarts in 50 cannulas compared with the baseline data. During the clinical evaluation, all IVs were tracked every 4 hours and all complication/reasons for removal were noted. On initiation of the use of the stabilisation device, the infiltration rate was reduced from the baseline level by 100%. There was also an 81% reduction in the rate of unscheduled IV restarts. The data from the clinical evaluation demonstrate the considerable benefits of utilising a cannula stabilisation device compared with the current hospital practice of using IV dressings only for securement with respect to infiltration levels and unplanned restarts. This device may have significant future benefits in terms of improving patient care and reducing healthcare expenditure.

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