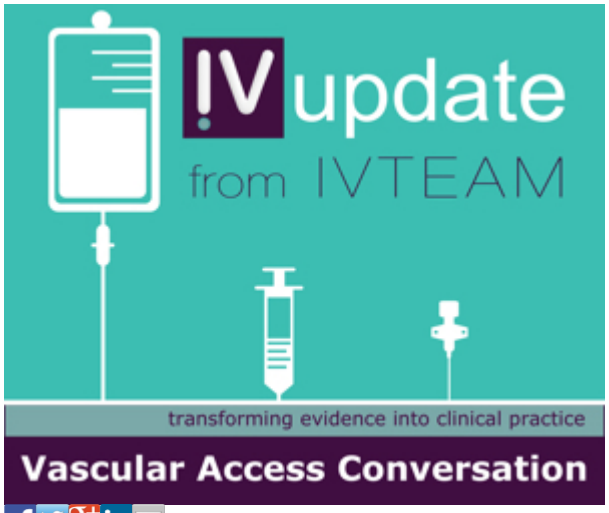

"…assess the effectiveness of four securement methods to prevent peripheral intravenous catheter (PIVC) failure" Marsh et al (2015).

Reference:

Marsh, N., Webster, J., Flynn, J., Mihala, G., Hewer, B., Fraser, J. and Rickard, C.M. (2015) Securement methods for peripheral venous catheters to prevent failure: a randomised controlled pilot trial. The Journal of Vascular Access. February 4th. .

Comparison of IV securement dressings for peripheral intravenous catheters http://ctt.ec/7mJ8x+ @ivteam #ivteam

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Abstract:

PURPOSE: To assess the effectiveness of four securement methods to prevent peripheral intravenous catheter (PIVC) failure.

METHODS: A single-centre, four-arm, randomised, controlled, non-blinded, superiority pilot trial was conducted in a tertiary referral hospital in Queensland (Australia), between November 2012 and January 2013. Adult patients, with a PIVC expected to remain in situ for ≥24 hours and admitted to general medical or surgical wards, were randomly allocated to standard polyurethane dressing (control, SPU), tissue adhesive (TA) with an SPU, bordered

polyurethane dressing (BPU) or sutureless securement device (SSD) with an SPU, experimental groups. The primary endpoint was PIVC failure, defined as premature device removal before the end of therapy because of pain, blockage, leaking, accidental removal and local or catheter-related bloodstream infection.

RESULTS: PIVCs were used for an average of 2.6 days across all study groups (n = 85). Catheter failure was lowest in the TA group (3/21, 14%) and highest in the control group (8/21, 38%), with BPU and SSD failure at 5/20 (25%) and 5/23 (22%), respectively. The adjusted hazard ratio of catheter failure was lowest in the TA group (0.50, 95% CI: 0.13-1.98), and then the BPU (0.52, 95% CI: 0.15-1.78) and SSD (0.61, 95% CI: 0.20-1.91) groups. No patient was suspected of a local or catheter-related bloodstream infection.

CONCLUSIONS: Current SPU dressings alone do not prevent many cases of PIVC failure. TA appears promising as an innovative solution, but may not be suitable for all patients. A larger Australian National Health and Medical Research Council (NHMRC)-funded trial has commenced.

Thank you to our partners for supporting IVTEAM