The primary aim of this research is to evaluate the feasibility of launching a full-scale randomised controlled efficacy trial across three CVAD types regarding CVAD securement and dressing, using predefined feasibility criteria" Ullman et al (2016).

Abstract:

INTRODUCTION: Paediatric central venous access devices (CVADs) are associated with a 25% incidence of failure. Securement and dressing are strategies used to reduce failure and complication; however, innovative technologies have not been evaluated for their effectiveness across device types. The primary aim of this research is to evaluate the feasibility of launching a full-scale randomised controlled efficacy trial across three CVAD types regarding CVAD securement and dressing, using predefined feasibility criteria.

METHODS AND ANALYSIS: Three feasibility randomised, controlled trials are to be undertaken at the Royal Children's Hospital and the Lady Cilento Children's Hospital, Brisbane, Australia. CVAD securement and dressing interventions under examination compare current practice with sutureless securement devices, integrated securement dressings and tissue adhesive. In total, 328 paediatric patients requiring a peripherally inserted central catheter (n=100); non-tunnelled CVAD (n=180) and tunnelled CVAD (n=48) to be inserted will be recruited and randomly allocated to CVAD securement and dressing products. Primary outcomes will be study feasibility measured by eligibility, recruitment, retention, attrition, missing data, parent/staff satisfaction and effect size. CVAD failure and complication (catheter-associated bloodstream infection, local infection, venous thrombosis, occlusion, dislodgement and breakage) will be compared between groups.

ETHICS AND DISSEMINATION: Ethical approval to conduct the research has been obtained. All dissemination will be undertaken using the CONSORT Statement recommendations. Additionally, the results will be sent to the relevant organisations which lead CVAD focused clinical practice guidelines development.

TRIAL REGISTRATION NUMBERS: ACTRN12614001327673; ACTRN12615000977572; ACTRN12614000280606.

Full Text

Reference:

Ullman, A.J., Kleidon, T., Gibson, V., Long, D.A., Williams, T., McBride, C.A., Hallahan, A., Mihala, G., Cooke, M. and Rickard, C.M. (2016) Central venous Access device SeCurement And Dressing Effectiveness (CASCADE) in paediatrics: protocol for pilot randomised controlled trials. BMJ Open. 6(6), p.e011197.

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