A research roundup of recent papers relevant to wound care

This section brings together information found online and published in other journals about wound healing research. It provides an overview, not critique, of these papers.

CONTROLLING COMPRESSION BANDAGING PRESSURE IN LEG ULCER RESEARCH TRIALS: A SUMMARY OF THE LITERATURE

Boxall SL, Carville K, Leslie GD, Jansen SJ et al (2019) *Phlebology* 24:268355519825590

The authors of this review used a series of literature searches to ascertain the extent to which trials to date have monitored compression bandage pressures in leg ulcer patient trials. Several studies were found, all of which investigated different techniques and materials on the end point of their individual effects on the healing rates observed for patients with venous ulceration. The authors note that most studies failed to monitor actual bandage application pressures and the application and interrater reliability and competency of participating clinicians. The omissions in the studies also included investigation into reliability and validity of sub-bandage pressure monitors and the degree to which compression bandaging achieves the recommended sub-bandage pressure. The literature reviewed revealed variation in the monitoring of sub-bandage pressure and in the reported sub-bandage pressures achieved by clinicians. The use of compression bandaging remains the 'gold standard' intervention for the treatment of venous leg ulcers. The authors conclude that the outcome of this review and current gaps in the literature poses difficulties when comparing study outcomes and attempting to develop evidence-based practice recommendations.

IMPROVING THE QUALITY OF CLINICAL RESEARCH ON CHRONIC WOUND INFECTION TREATMENT: EXPERT-BASED RECOMMENDATIONS

Pompomio G, Tedesco S, Peghetti A et al (2019) *J Wound Care* 28: Suppl 1

This review sought to produce recommendations for the design of reliable and informative clinical investigations in chronic wound infection. To do so, a multidisciplinary panel of international experts from Italy, UK, Ireland and the US was convened. Semi-structured discussions centred around improved selection and description of target populations, interventions and outcomes, and which infection-related criteria to apply in order to achieve a high-quality trial. Recommendations from the panel were using the Delphi method and GRADE Working Group suggestions. Substantial agreement was reached amongst the experts on 37 recommendations; 10 of these centred on the description and selection of a target population, 4 related to interventions and 15 to outcomes. A further 8 statements about critical methodological points were approved. The panel acknowledge the difficulties researchers have in controlling heterogeneity and suggest to refer to the publication guidance to help shape future study design. Developing recommendations in a systematic manner through a representative group of experts could generate tools for improving the design of clinical trials in this and other areas of practice.

PREDICTION OF IN-HOSPITAL PRESSURE ULCER DEVELOPMENT

Cichosz S, Voelsang A-B, Tarnow L, Hasenkam J et al (2019) *Adv Wound Care (New Rochelle):* PMC6350059

The authors of this paper have investigated the introduction of a new risk assessment tool, Qscale in relation to its ability to accurately predict PU in the acute hospital setting. They recruited 383 patients from three departments. The study included a 2-steps approach: 252 patients were recruited to train staff on the use of the tool. Then 131 patients were used to validate the tool. The validation data yielded an area under the curve (AUC) of 0.82. The Qscale had a significantly higher AUC compared with that of the Braden Scale with an AUC of 0.76 ($p<0.05$). When comparing the performance at specific thresholds, a sensitivity of 47% and a specificity of 94% were observed. This was significantly ($p<0.05$) better than the Braden score with a sensitivity of 20% and a specificity of 94%. The authors conclude that the tool shows promising results versus the Braden on training and validation data.

JEANETTE MILNE
Lead Nurse Tissue Viability Northumbria, Healthcare NHS Foundation Trust