

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. The aim is to provide an overview, rather than a detailed critique, of the papers selected.

CONSIDER - CORE OUTCOME SET IN IAD RESEARCH: STUDY PROTOCOL FOR ESTABLISHING A CORE SET OF OUTCOMES AND MEASUREMENTS IN INCONTINENCE-ASSOCIATED DERMATITIS RESEARCH

Van den Bussche K, De Meyer D, Van Damme N et al (2017) *J Adv Nurs* 73(10): 2473–83

This paper proposes a core outcome set for researchers planning to study incontinence-associated dermatitis. It also highlights the clinical signs of infection in these skin lesions and their probable causes. It provides useful insight into achieving a differential diagnosis that will enable the early initiation of treatment prior to sampling results. The group defines infection as the presence of non-healing, pain, increased wound size and/or warmth. It suggests that white scaling of the skin in these areas is suggestive of a fungal infection. Satellite lesions defined as pustules surrounding the lesion are suggestive of a *Candida albicans* (fungal) infection. While slough visible in the wound bed with a green appearance supports bacterial infection with *Pseudomonas aeruginosa*. The clinical symptoms associated with these are, as described by Schultz et al (2003): increased exudate levels, purulent exudate (pus), or a shiny appearance of the wound bed due to the presence of replicating microorganisms within the wound and the presence of injury to the host.

OCCURRENCE AND PERSISTENCE OF BIOFILMS ON CARED CHRONIC WOUNDS: A LARGE MULTICENTRIC CLINICAL STUDY

Fromantin I, Seyer D, Rollot F et al (2018) *Wound Medicine* 23: 28–34

This study discusses the difficulty associated with achieving a clinical diagnosis of biofilm and its prevalence in chronic wounds. Previous studies lean towards the proof of biofilm presence on non-healing chronic wounds. It is a prospective cohort

study of 100 plus patients with chronic wounds (>6 weeks) conducted in four centres over 2 years. Samples were taken from the deepest and/or most necrotic zone of the wound after cleansing. The study team wanted to report biofilm occurrence in cared-for wounds after including anti-biofilm treatment. Fluorescence microscopy was used to demonstrate the evidence of biofilms in wound samples. Biofilms were identified on 23% of cleansed wounds. The results differ from many previous studies in the literature, which report 60% of biofilms on chronic wounds. This could be explained by the inclusion criteria and sampling procedures. It also suggests that current strategies in use to manage wound biofilms warrant further research into their efficacy given that one in four wounds had a biofilm detected

ABSORBABLE VS NON ABSORBABLE SUTURES FOR WOUND CLOSURE. SYSTEMATIC REVIEW OF SYSTEMATIC REVIEWS

Sheik-Alia S, Guets W (2018): *Wound Medicine* 23: 28–34

This review aims to provide an overview of evidence on absorbable (AS) and non-absorbable sutures (NAS) for the closure of surgical incisions. The authors searched for systematic reviews and randomised controlled trials (RCTs) published evidence contained in Medline, Embase and the Cochrane Library. They included those that matched a given inclusion criterion and analysed data on surgical site infections, post-operative complications and risk of wound dehiscence. This yielded data on 5,781 patients in 25 RCTs. There was no significant difference ($p < 0.05$) noted in surgical site infections, post-operative complications or risk of wound dehiscence post use of NAS or AS sutures. The results show no superiority between the suture types in the three defined outcomes: surgical site infections, post-operative complications and risk of wound dehiscence. It is unlikely that this is truly representative given that the authors acknowledge large differences in the study populations of individual RCTs studied and suggest that future studies focus on the evaluation of the differences between absorbable and non-absorbable sutures that are reflected in size of wounds and location. 