Case series: Thinking outside the square. Low frequency ultrasound debridement in non-healing burn wounds.

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Introduction/Background

Chronic wounds cost Australian health $2.85 billion each year. The personal cost to the individual with a chronic wound is much harder to measure. The World Health Organisation identifies the areas of physical, mental and social wellbeing associated with wound healing and the positive and negative implications of the three psychosocial factors. Chronic wound care is not considered a specialised area and, as a result there are lot of practices that are not evidence based. Patients are often on a continuum of long-term analgesia and antibiotics to treat biofilms.

Aim/Purpose of the project

The aim of this case series is to contribute to the discussion on the use of Low Frequency Ultrasound Debridement (LFUD) in a non-healing burn wound. Biofilms within chronic wounds create an inefficient inflammatory process leading to a cycle of increased exudate and delays in healing. Scar severity is linked to time to healing of a burn wound. Every day over 21 days after a burn that a wound is not healed, increases the risk of a hypertrophic scar. Scarring, along with long term treatment for a chronic wound, impacts on a person's life.

Methods

Case series review of burn injured patients with non-healing wounds within scar tissue. Surgery has not resulted in completely healed wounds in the first instance and subsequent surgery may not be an option.

Results/Outcome

Wound bed preparation has been discussed in the literature for decades. The inclusion of cost-effective adjunctive therapies that can be administered during an outpatient appointment are becoming more prevalent. LFUD is one evidenced based intervention that facilitates removal of non-viable tissue and dispersal of biofilm. This can hasten wound healing and facilitate the emotional wellbeing of a patient.