A PROSPECTIVE CLINICAL EVALUATION OF A TOPICAL NEGATIVE PRESSURE (TNP) WOUND THERAPY SYSTEM IN THE RESOLUTION AND MANAGEMENT OF COMPLEX WOUNDS

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Aim: The principal of exposing wounds to TNP is not new and has been used long before commercially based systems became available. As new TNP technologies emerge it is important for clinicians to have evidence of clinical outcome. This research aimed to evaluate patients with a variety of complex wounds who were allocated a new TNP device for wound care.

Method: A multi-centre, prospective clinical outcome study was conducted in 3 acute care hospitals. Participants considered for inclusion were those with acute or chronic wounds in whom healing would be expected or demonstrated to be problematic or slow. Data collected; demographic, past & present medical history, wound type, dimensions and progress as well as patient/clinician acceptability. Wounds were assessed at each dressing change; formal wound measurements and photography were conducted.

Results: 29 patients with a range of complex or hard to heal wounds completed the study. Mean wound surface area was 30.2cm$^2$ (range 1.9cm$^2$ - 76.6cm$^2$) at the start of treatment. Average duration of therapy was 8.9 days (range 2-17 days) with a mean wound size reduction for all subjects (mixed wound types) of 23%. A consistent trend towards increased granulation tissue and epithelialisation, alongside decreased slough and necrotic tissue was observed. In general patients found the therapy both comfortable and acceptable whilst clinicians reported a high level of satisfaction with the therapy.

Conclusion/Discussion: This study has shown positive and encouraging results in the treatment and management of complex wounds and provides effective and rapid progress towards wound improvement and healing. In addition the technology was easy to use and was highly acceptable to both clinicians and patients alike.