The Management of Chronic Wounds Using MIST

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As a Tissue Viability Team who deliver care in clinics as well as domiciliary visits we were very interested in evaluating the MIST Therapy with our patients. We had seen previous evaluations and our podiatry team had been trialling the MIST Therapy. The low energy ultrasound generated by MIST Therapy promotes wound healing through wound cleansing and maintenance debridement, removing yellow slough, fibrin tissue, exudate and bacteria. Norris and Henchy, 2010, discuss the usefulness of ultrasound in wound healing and also conclude that the system was useful in improving patient outcomes. It is also transportable and can be used in the home environment.

Patient 1: On Presentation
The patient has long standing ulceration for over 40 years, has Friedreich’s ataxia and very little calf pump so compression bandaging is only partially effective.
Ulcers never fully heal or even reduce in size.
The target ulcer measured 31.7cm² in surface area prior to commencing MIST Therapy.

Patient 1: Results
After 5 MIST treatments the ulcer now measures 29.1cm² in surface area and is significantly shallower.
There is a 9% reduction in surface area on a recalcitrant ulcer that rarely reduces in size.
MIST Therapy was stopped for a short period and the wound deteriorated, MIST Therapy was recommenced and the wound continues to improve.

Patient 2: On Presentation
The patient is a 52 year old insulin dependant diabetic who also takes warfarin.
The patient has recently lost 6.5 stone and presented with pressure ulcers to abdomen and hip.
The hip ulcer was managed using MIST Therapy and at first presentation the ulcer was 1.41cm² in surface area

Patient 2: Results
After 5 MIST sessions the wound now measures 1.08cm² in surface area which is approximately a 25.5% reduction in size.
The other unmisted sore only reduced by 17.5% during the same treatment period.
The wound went on to complete healing.

We saw a measurable decrease in wound size in all patients who used the MIST Therapy. The system needs minimal training to use and none of the patients reported pain or discomfort whilst the system was being used. It’s portable nature means that it can be used in the home environment and the non-invasive nature ensures that it is an easy to use debridement system. It would appear to offer another useful addition to the wound healing armoury.