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Background

A 25-year-old male who presented with a trauma wound to the right upper tibial area. He had sustained the injury during a rugby match 6 weeks earlier. Two weeks after injury, he presented to AGE with cellulitis, which was treated for 14 days with antibiotics and an absorbent carboxymethylcellulose (CMC) fibre dressing, which was changed daily. The cellulitis had resolved at 2 weeks. The wound was treated for a further 2 weeks with the CMC dressing and compression therapy (the latter is used as standard therapy for all lower limb wounds with cellulitis).

Despite this treatment and the presence of clean granulation tissue, the wound had stalled and remained deep. On presentation to the outpatient dressing clinic, the wound measured 3.8cm long x 2cm deep and 2.5cm wide; despite the deep cavity, the wound bed was 100% clean. There was a moderate level of serosanguinous exudate, and the patient reported no wound-related pain.

The decision was made to initiate the NANOVA™ Therapy System; compression was continued. Dressing changes were scheduled for every 2 days.

Week 1 review: Over the course of the first 8 days of treatment (fourth dressing change), the wound had improved considerably. It now measured 2.8cm x 0.5cm x 1cm, a 93% reduction in wound volume from baseline. The wound bed had begun to epithelialise, and the remaining tissue was healthy and granulating. The patient was highly satisfied with the progress of the wound and the discreteness of the pump. Because there was still a moderate level of exudate, the decision was made to continue with the NANOVA™ Therapy System and compression, with dressing changes every 3 days.

Week 2 review: The wound had continued to progress towards healing, with 40% epithelialisation and 60% granulation tissue. The wound measured 1.5cm x 0.3cm x 0.8cm — a 98% reduction in wound volume from baseline. Exudate levels were low. The NANOVA™ Therapy System was 'very easy' to use, and the patient rated comfort and satisfaction with the progress of his wound highly. The NANOVA™ Therapy System plus compression was continued for a further week.

Week 3 review: The wound measured 1.1cm x 0.1cm x 0.5cm (over 99% reduction in volume from baseline), and the wound bed comprised 90% epithelialising and 10% granulating tissue. Exudate levels remained low. Because of the comfort of dressing wear and ease of use, the regimen of NANOVA™ Therapy plus compression was continued for another week.

Week 4 review: The wound had healed fully. The patient reported he was 'delighted' with the result. The NANOVA™ Therapy System was rated highly by the patient on comfort of application, comfort during normal activities, ease of identifying when to depress the plunger and ease of pressing the plunger. From a clinician perspective, the dressing was fast to apply (typically 5 minutes) and easy to use. The goals of therapy with the NANOVA™ Therapy System were achieved to a high level of satisfaction for patient and clinician alike.

As with any case study, the results and outcomes should not be interpreted as a guarantee or warranty of similar results. Individual results may vary depending on the patient's circumstances and condition.

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The therapy system was 'very easy' to use; comfort levels and satisfaction with wound progress were rated highly by the patient.



Baseline: 7/05



NANOVA™ Therapy System in situ



Week 1: 14/05



Wound healed: 4/6

Summary

Trauma wound of 6 weeks' duration
93% reduction in wound volume after 8 days
Complete wound healing achieved at 4 weeks with the NANOVA™ Therapy System

