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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



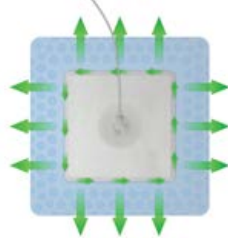
Wound healed: 4/6

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

1 Sealing the Dressing

- After application, smooth the silicone around the pad, working outward to the edge of the dressing.
- If you observe a crease in the adhesive border, lift and reseal rather than trying to iron out the wrinkle.

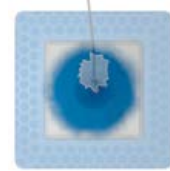


2 Exudate & Dressing Positioning

- When managing wounds on dependent anatomy, fluid absorption capacity can be optimised by placing the dressing so there is more absorptive pad below rather than above the wound.
- Fluid is retained within the absorptive core of the dressing to minimise the potential for maceration.



OK



Better

3 Anatomical Contours

- Pay attention to anatomical contours.
- Positioning the dressing as a square on compound curves can transfer tension to the dressing border. This can be avoided and conformity improved if the dressing is rotated.



4 Joints

- When applying the dressing close to joints, care should be taken to ensure the dressing pad will not be creased in a tissue fold. Orient the dressing to minimise the amount of dressing pad or border that is extended over joints. On lower leg wounds this includes:
 - The malleolus.
 - The flexion point between the leg and dorsum of the foot.
 - Achilles tendon to the rear.



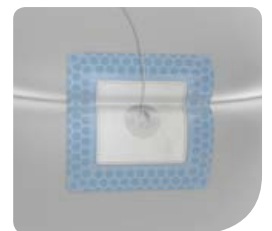
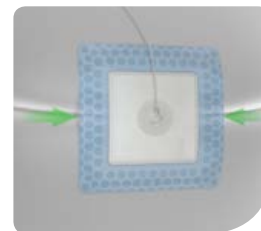
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5 Skin Folds & Depressions

- Stability of anatomy is not always obvious. Observe movement of the wound site before placing the dressing (patient standing vs. supine position).
- Where practical, place the port above or below a tissue fold. Placing the port over a skin fold or tissue depression may increase tension on the adhesive border which could lead to loss of seal. Careful placement may also be more comfortable.



In Summary:

- Consider the anatomy, how the dressing will conform, and rotate the dressing when applying to areas that present compound curves.
- Orient the dressing to minimise the amount of pad or adhesive border over joints, for example the ankle.
- Position the pressure transfer port above or below tissue crease lines and folds.
- When in doubt, have the patient sit or ambulate so you can observe movement at and around the wound site.
- Provided clinically appropriate, consider using a thin hydrocolloid or similar primary contact layer to bridge voids under the adhesive border.
- It is okay to use clinically appropriate secondary fixation if deemed essential to maintaining an effective seal.
- If the wound appears too large for the dressing, consider an alternative negative pressure system such as V.A.C.VIA™ or ACTIV.A.C.™ Therapy Systems.

Customer Contact Information

For questions regarding this product, supplies, or additional information about KCI products and services, please contact your Acclity sales authorized representative. Visit kci-medical.com

NOTE: Specific indications, contraindications, warnings, precautions and safety information exist for KCI products and therapies. Before use, clinicians must review all risk information and essential prescribing information which can be found in the NANOVA™ Therapy System Instructions for Use. This material is intended for healthcare professionals.

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