NANOVA™
THERAPY SYSTEM

CASE STUDY:
NATAL CLEFT WOUND OF 12 MONTHS' DURATION

Caroline Dowsett,
Nurse Consultant tissue Viability, East London NHS Foundation Trust

Background

An 82-year-old female who presented to the community dressing clinic with a wound of unknown origin in the natal cleft. It had recently increased in size and had been present for 12 months. She had arthritis and had undergone coronary artery bypass graft surgery 10 years prior.

The wound had previously been treated with a silver primary dressing and a hydrocellular foam bordered dressing, with dressing changes twice weekly. There had also recently been a 2-week trial of a further antimicrobial dressing and 3-day wear time. At presentation on 16 February, the wound measured 2cm long x 1cm wide x 1cm deep and was painful — rated 4 out of 10 on the visual analogue scale (VAS). It comprised 50% granulation tissue and 50% slough, with a moderate level of serous exudate. The periwound skin was assessed to be healthy. The NANOVA™ Therapy System was considered due to the lack of response to previous treatments and a reluctance to admit the patient to hospital due to her advancing years and frailty. Dressing changes were scheduled to be every 3 days.

Week 1 review: The wound had a moderate level of exudate and its overall condition had improved, with 100% granulating tissue as well as a small reduction in depth, to 0.7cm (a 15.7% reduction in wound volume from baseline). Changing the NANOVA™ Therapy System took 2 minutes and took just 2 presses of the plunger to achieve negative pressure. The patient had experienced discomfort during the previous dressing changes, and was reluctant to take analgesia. Despite the lack of pain control, pain during wear time was rated as 4 and pain at dressing change as 5 out of 10 on the VAS.

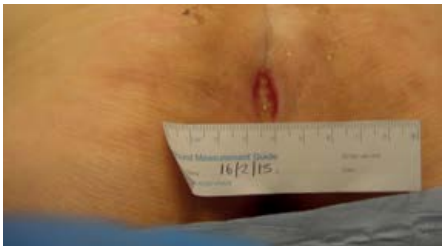
This difficult-to-dress wound improved substantially and the patient was able to be treated at home.

Review 2: There was good improvement in the wound; the surrounding skin apeared healthy and exudate levels were moderate. The NANOVA™ Therapy System was therefore discontinued on 26 February and a standard dressing applied.

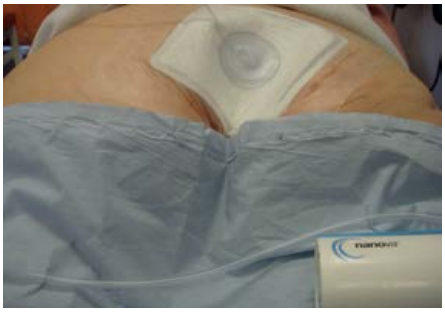
Review 3: On 12 March, the wound had deteriorated, although there had been a small reduction in depth, to 0.5cm and the wound bed comprised 20% granulating and 80% sloughy tissue. It was decided to restart NANOVA™ Therapy and application took just 2 minutes, with 3 depressions of the plunger needed to achieve negative pressure. The patient rated pain during dressing change as 3 out of 10 on the VAS. Dressing changes were undertaken every 3 days.

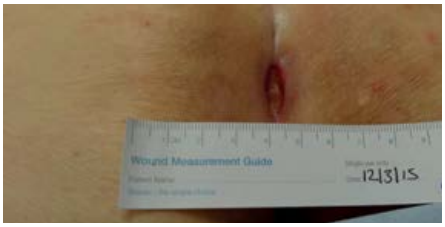
Review 4: One week later, the wound had improved with 80% granulation tissue and 20% slough. There was also a further reduction in size, to 1.8cm by 0.5cm by 1cm (a 55% reduction in size from baseline). Periwound skin was healthy. The dressing remained very easy to use from both the patient and clinician perspectives. The NANOVA™ Therapy System was discontinued as the goals of therapy had been achieved.

Reprinted with the permission of *Wounds UK*. This case study was originally published in a Round Table Discussion Document: Using NANOVA™ Therapy System in Practice: a round table discussion. London: *Wounds UK*. 2014.

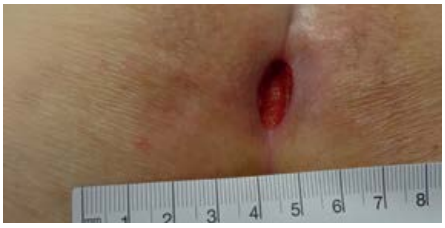


Baseline: 16/2


NANOVA™ Therapy System in situ



Review 3: 12/3


Review 4: 19/3

Summary

- Natal cleft wound of 12 months' duration in an elderly patient with few treatment options available
- 55% reduction in wound volume over the course of treatment
- NANOVA™ Therapy allowed the patient to be treated in the community and avoided the need to admit her to hospital

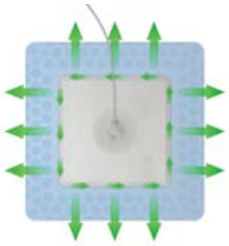
NANOVA™ THERAPY SYSTEM

NOTE: These Hints & Tips are not intended as a substitute for the Safety Information and Instructions for Use accompanying the NANOVA™ Therapy System. Please consult a physician and product instructions for use prior to application. This material is intended for healthcare professionals.

HINTS & TIPS

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

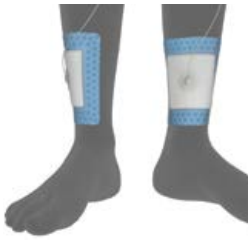
- When managing wounds on dependent anatomy, fluid absorption capacity can be optimised by placing the dressing so there is more absorptive pad below rather than above the wound.
- Fluid is retained within the absorptive core of the dressing to minimise the potential for maceration.

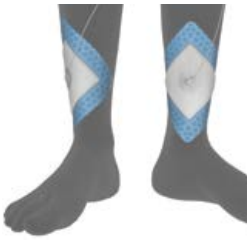
OK

Better

3 Anatomical Contours

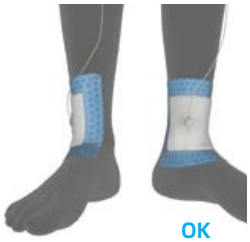
- Pay attention to anatomical contours.
- Positioning the dressing as a square on compound curves can transfer tension to the dressing border. This can be avoided and conformity improved if the dressing is rotated.



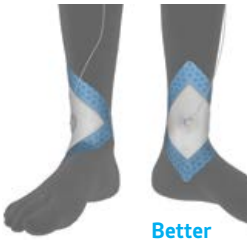


4 Joints

- 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 malleous.**
  - **The flexion point between the leg and dorsum of the foot.**
  - **Achilles tendon to the rear.**



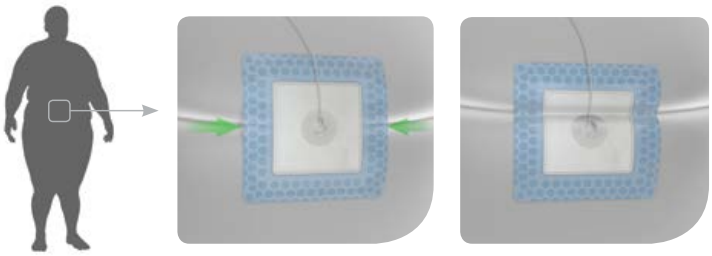
OK



Better

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 Acelity 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.

DSL#16-0203.SYX5422.OUS.CS3 (5/16)

Acelity™