Avelle™
Negative Pressure Wound Therapy System

Case Study Compendium

The use of the Avelle™ Negative Pressure Wound Therapy System

ConvaTec

The Avelle™ NPWT System: an NPWT device incorporating Hydrofiber® Technology

The Avelle™ NPWT System includes a disposable, portable battery powered pump unit and absorbent wound dressings, which are connected via an airway and luer-lock fitting (Figure 1). The Avelle™ NPWT Dressing is powered by Hydrofiber® Technology which helps prevent periwound maceration[1], a potential complication associated with NPWT that can lead to delayed healing[2]. Hydrofiber® Technology is ConvaTec's proprietary technology designed to help create a beneficial moist wound environment for healing[3]. The device is indicated for patients with a low to moderately exuding wound that would benefit from NPWT, with such wounds including:

- Chronic wounds
- Acute wounds
- Traumatic wounds
- Subacute and dehisced wounds
- Flaps and grafts
- Surgically closed incisions

The Avelle™ NPWT Dressing may be worn for up to 7 days, depending on the level of exudate and per clinical need*. The pump may be used for up to 30 days (batteries may need to be replaced over this period), and can therefore be used for multiple dressing changes within the 30-day period.

** Please refer to package insert for complete instructions for use.*

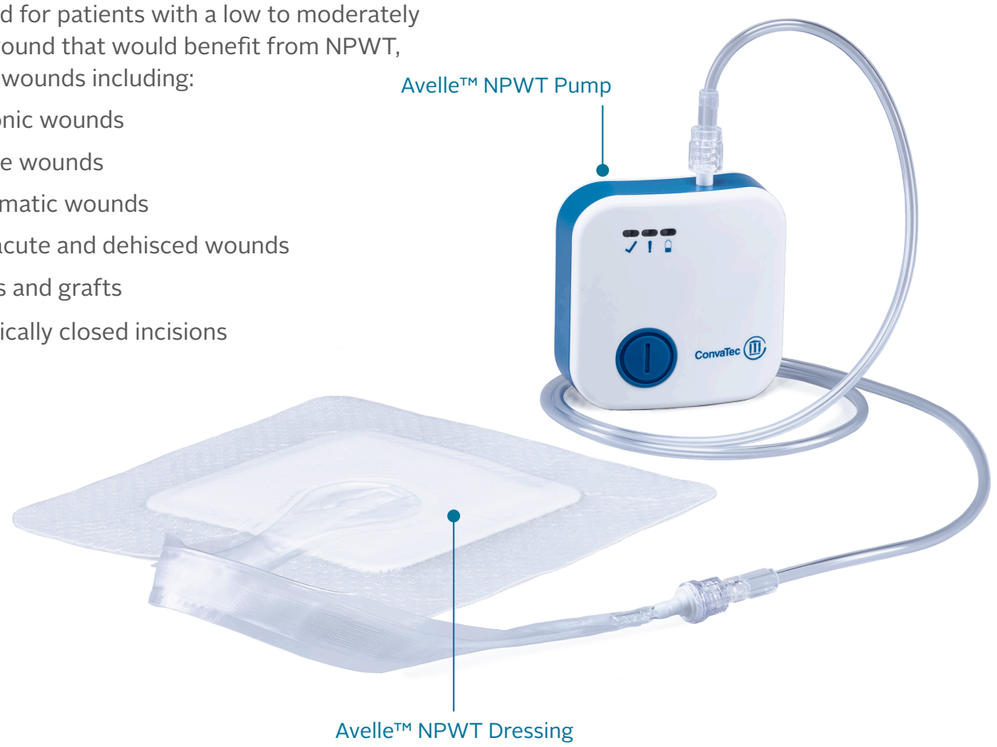


Figure 1

1. Waring MJ, Parsons D, Physico-chemical characterisation of carboxymethylated spun cellulose fibres. Biomaterials. 2001;22(9):903-912.
2. Hanft JR, Henao M. How To Prevent Periwound Maceration With VAC Therapy. Podiatry Today. 2010; 23(6)
3. Bishop SM, Walker M, Rogers AA, Chen WY. Importance of moisture balance at the wound dressing interface. JWound Care 2003;12(4):125-8.

Avelle™ NPWT System - The Hydrofiber® Difference

A collection of case studies demonstrating the clinical experiences across a variety of indications and care settings.

Closed Incisions

4. Closed Incision 6-day Treatment
5. Closed Incision 10-day Treatment

Acute Wounds

6. Dehisced Abdominal Wound 30-day Treatment
8. Dehisced Tibial Wound 19-day Treatment
9. Dehisced Ankle Wound 21-day Treatment
10. Dehisced Ankle Wound 28-day Treatment
11. Dehisced Abdominal Stoma Site 20-day Treatment
12. Dehisced Incision 30-day Treatment
13. Dehisced Ankle 30-day Treatment
14. Dehisced Tibia 28-day Treatment
15. Dehisced Tibia and Fibular 29-day Treatment
16. Dehisced Acute Surgical Wound 28-day Treatment
18. Skin Grafts 29-day Treatment
20. Dehisced Lower Limb 16-day Treatment
22. Traumatic Wound 26-day Treatment

Chronic Wounds

24. Venous Leg Ulcer 56-day Treatment
25. Mixed Aetiology Leg Ulcer with Punch Skin Grafts 7-day Treatment
26. Mixed Aetiology Leg Ulcer 26-day Treatment

Case study:
Closed Incision 6-day Treatment

INTRODUCTION

Dr Hélène Charitansky, Gynaecological Surgeon, Specialist in Senology, Institut Bergonié Bordeaux, France conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A 35-year-old woman underwent a course of chemotherapy and radiotherapy for breast cancer, she had no other co-morbidities. She went on to have a skin-sparing mastectomy, axillary node dissection and immediate breast reconstruction using an autologous latissimus dorsi flap. Due to cancer treatment being given prior to surgery, the wound was predisposed to complications, making her an ideal candidate for NPWT. The surgical wound was 15cm long and stitched in layers, ending with a resorbable subcuticular structure. The surrounding skin had a purplish tinge (Figure 1). At the end of the operation the Avelle™ NPWT System was placed on the dorsal wound.

RESULTS

Due to the proximity of the drain, the main challenge during the first 2 postoperative days was to keep the dressing sealed. The dressing was repositioned on the second day with the port in a paravertebral position to the wound. On day 6 the drain was no longer productive, this was removed and the patient taken off NPWT, all signs of peri-wound skin breakdown had disappeared (Figure 2). After discharge the wound was treated with a Hydrofiber® Technology foam dressing for 5 days, after which it was exposed to air.

Signs of peri-wound skin breakdown disappeared.

Easy to remove Avelle™ NPWT dressings.

No pain during wear or dressing changes.

Patient able to mobilise, shower and dress with the Avelle™ NPWT System in place.

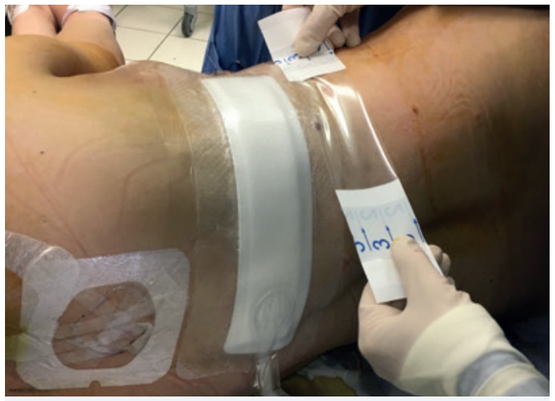


FIGURE 1

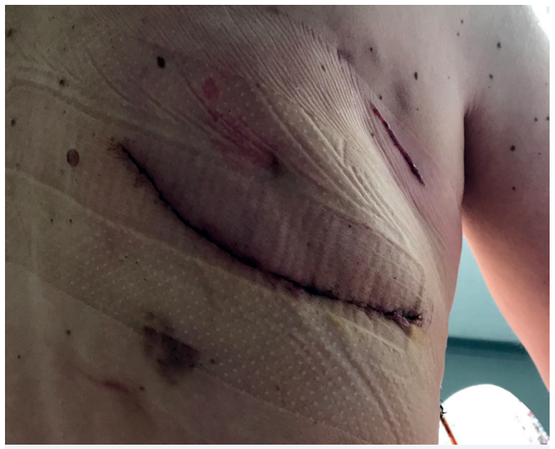


FIGURE 2

CONCLUSION

The team found the dressings easy to remove and the patient did not experience any pain during wear or dressing changes. Paravertebral positioning of the port resulted in a better seal, compared with when it had been situated next to the drain. The portable Avelle™ NPWT Pump and slimline dressing allowed the patient to remain mobile, shower and dress as normal. The patient developed blisters, these were caused by the polyurethane film used to seal the dressing and quickly resolved following the application of hydrocolloids.

Case study:
Closed Incision 10-day Treatment

INTRODUCTION

Dr Hélène Charitansky, Gynaecological Surgeon, Specialist in Senology, Institut Bergonié Bordeaux, France conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A 45-year-old woman with breast cancer underwent a mastectomy with immediate breast reconstruction using a total latissimus dorsi flap. The patient was severely obese and had just stopped smoking. The surgical wound was 21cm and the skin closed stitched with resorbable subcuticular sutures. The wound broke down and was measured at (L)6cmx(W)2cm with extensive undermining. The wound was producing copious amounts of fluid (approximately 200cm^3 of lymph per day in the dorsal drain (Figure 1). Avelle™ NPWT System was applied on day 2, with the aim to improve vascularisation and promote healing.

RESULTS

The dressing was changed on days 5, 7 (Figure 2) and 10 postoperative, at which point NPWT discontinued. The patient tolerated the NPWT well, she did not experience pain at dressing changes or during use and the dressing seal was maintained throughout. During this time the wound showed some improvement, measuring (L)6cmx(W)1.5cm, exudate in the drain remained stable. The wound had dried up; dead tissue had been successfully debrided and the peri-wound skin was less purple. The patient was discharged home with a Hydrofiber® Technology foam dressing in place.

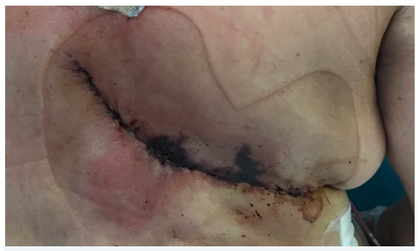
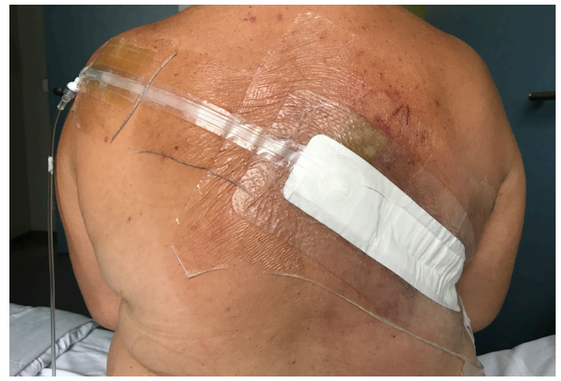


FIGURE 1



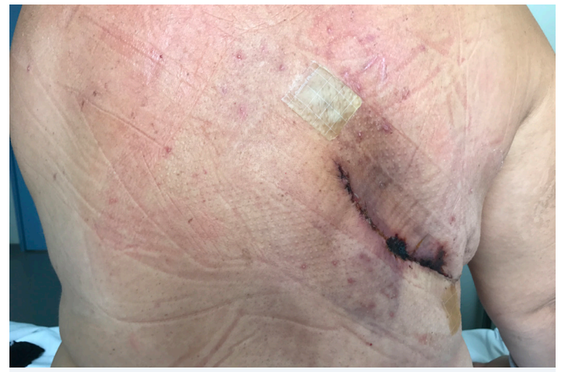


FIGURE 2 (BEFORE AND AFTER)

CONCLUSION

The portable Avelle™ NPWT Pump and slimline dressing allowed the patient to remain mobile, shower and dress as normal. The patient developed blisters, these were caused by the polyurethane film used to seal the dressing and quickly resolved following the application of hydrocolloids.

No pain during wear or dressing changes.

Peri-wound skin improvement.

Patient able to mobilise, shower and dress with the Avelle™ NPWT System in place.

Case study:
Dehisced Abdominal Wound 30-day Treatment

INTRODUCTION

The Avelle™ NPWT System is designed for the management of low to moderately exuding acute and chronic wounds. The system incorporates a disposable Avelle™ NPWT pump with up to 30-day lifespan* and the Avelle™ NPWT dressing. Judith Barnard, BSc (Hons) a Tissue Viability Clinical Nurse Specialist, Northern Lincolnshire and Goole NHS Foundation Trust conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A 49-year-old woman with a history of type 2 diabetes mellitus and overflow faecal incontinence was admitted to hospital for a laparotomy and defunctioning colostomy. Two months later, she was readmitted for intravenous antibiotic therapy when the surgical incision became infected and dehisced, producing moderate amounts of malodorous exudate. In addition, an insulin sliding scale regimen was used to correct the patients unstable blood sugar levels. Due to the wound proximity to the stoma, it was difficult to achieve an effective seal with standard dressings; patient dignity was compromised, the wound was exposed to faecal matter and 2-3 dressing changes were needed each day. At this point the patient was referred to the Tissue Viability Clinical Nurse Specialist, where on initial assessment the wound measured (L)1.5x(W)1.5x(D)1.5cm. Slough was visible around the deep tension sutures on the wound bed and the peri-wound skin was macerated with visible signs of oedema in the surrounding tissue (Figure 1.1). A barrier film was applied to the peri-wound skin and the cavity was packed with AQUACEL® Ribbon. Using a 16x16cm Avelle™ NPWT dressing, negative pressure was successfully achieved despite the proximity of the wound to the stoma.

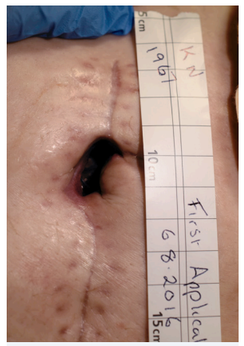


FIGURE 1.1
The wound before treatment with Avelle™

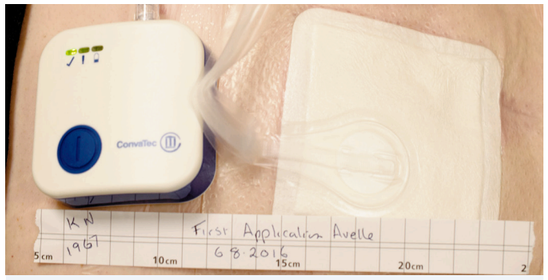


FIGURE 1.2
Avelle™ in place (dressing size: 16x16 cm).

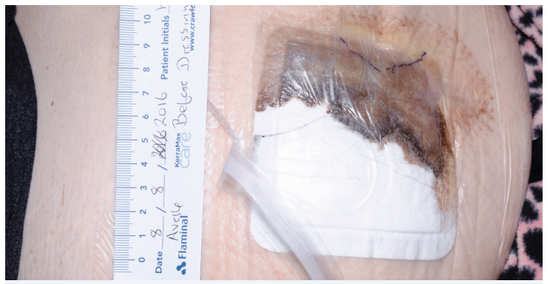


FIGURE 1.3
After 2 days of NPWT, the 16x16 cm Avelle™ NPWT dressing is soaked through but still intact.

FIGURE 1.4
The exudate is contained within the Avelle™ NPWT dressing.

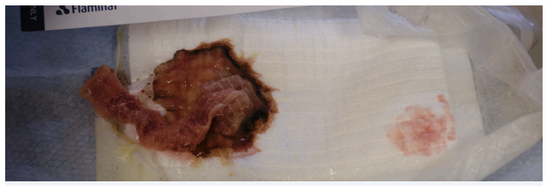


FIGURE 1.5
The same dressing after its removal.

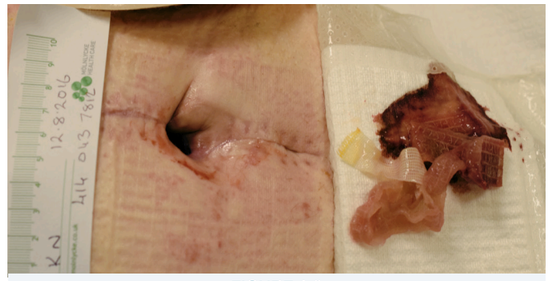


FIGURE 1.6
The AQUACEL® ribbon wicks fluid from the wound bed.

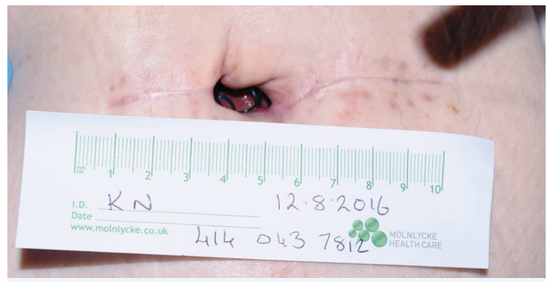


FIGURE 1.7
The wound after cleansing.

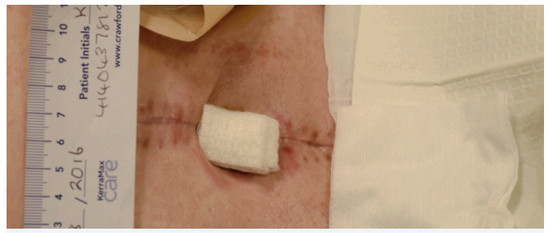


FIGURE 1.8
Improvement in the peri-wound skin.

FIGURE 1.9
The saturated silicone foam dressing

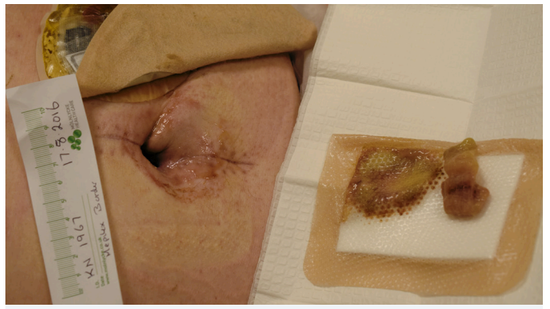


FIGURE 1.10
Excoriation of the peri-wound skin.

RESULTS

On day 2 of NPWT, the dressing was replaced as the exudate had reached the port of the dressing, therefore a larger, 16cmx21cm dressing was applied. On day 4 a buzzing noise was heard from the pump indicating it was trying to establish negative pressure, on assessment the dressing had creased, disturbing the seal, but overall had contained the exudate well. On days 6 and 9 the dressing was changed; all exudate had been contained. The wound size had not changed, but the wound bed had improved significantly. The moist environment facilitated by the Hydrofiber® Technology dressing had helped to debride the slough, the oedema had reduced and the wound bed was pink and healthy. On day 11 the patient presented with a silicone foam dressing which was saturated and leaking, the peri-wound skin excoriated and inflamed (Figure 1.9). The doctor had suggested discontinuing NPWT, however the patient felt this would affect her confidence and the TVN agreed as the wound continued to exude. NPWT was continued until day 30 when it was replaced with an adhesive silicone foam with the wound depth superficial.

CONCLUSION

It was reported that the patient was able to continue with her everyday activities of daily living with the Avelle™ NPWT System in place. She found it quiet, light and portable, and most of all comfortable.

Moist environment facilitated by the Hydrofiber® Technology dressing helped to debride the slough.

Oedema reduced and a pink and healthy wound bed.

*Battery change may be required during pump lifetime.

Case study:
Dehisced Tibial Wound 19-day Treatment

INTRODUCTION

Emma Sharp, Limb Reconstruction Clinical Nurse Specialist (CNS), NHS Glasgow and Clyde conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A 36-year-old man underwent internal fixation of the distal tibia following a fall, he had a history of drug misuse but no other co-morbidities. When the cast was removed at a routine 2-week follow-up, the wound had dehisced and become infected. The initial wound measurement was (L)9.5x(W)2.0x(D)0.5cm, with 70% slough, 20% granulation and 10% necrotic tissue, producing low levels exudate. The peri-wound skin was dry and eczematous, with some erythema that was warm to touch (Figure 1).

A 12x31cm Avelle™ NPWT Hydrofiber® Technology dressing was selected. The leg cast was replaced with a boot to increase stability and access to the Avelle™ NPWT Hydrofiber® Technology Dressing.

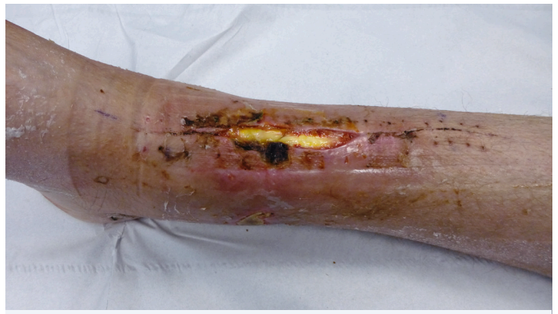


FIGURE 1
The wound before treatment with Avelle™

RESULTS

At the first dressing change on day 7, the wound remained the same size however, presented 60% slough, 40% granulation and 0% necrotic tissue. By day 12, the wound had reduced to (L)8.0x(W)2.0x(D)0.5cm. The Avelle™ NPWT System was applied to a second previously healed wound, near the first, which reoccurred, measuring (L)3.0x(W)3.0x(D)1.0cm with 100% slough. On day 7 of treatment to the second wound there was a reduction in size to (L)2.0x(W)2.0x(D)1.0cm and only 50% slough, with 50% granulation tissue.

At final dressing change, day 19, the wound measured (L)6.0x(W)2.5x(D)0cm and comprised 90% granulation and 10% slough (Figure 2). The increase in width was attributed to the autolytic debriding properties of Hydrofiber® Technology of the Avelle™ NPWT Dressing. Unfortunately, the patient resumed his drug habit and ceased treatment.

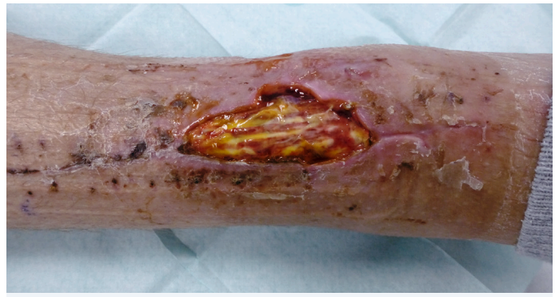


FIGURE 2
The wound at the end of treatment with Avelle™

CONCLUSION

Although treatment was not fully concluded, the CNS reported that she found application and removal of the Avelle™ NPWT dressings easy. She valued the advantages of Avelle™ over other NPWT Systems she had previously used, and the ability to change a dressing without replacing the pump. The Hydrofiber® Technology dressings were noted to have stayed in place between changes. There was a clear improvement in wound size and condition with use of the Avelle™ NPWT System.

Easy application and dressing removal.

Autolytic debridement properties due to Hydrofiber® Technology.

Case study:
Dehisced Ankle Wound 21-day Treatment

INTRODUCTION

Emma Sharp, Limb Reconstruction Clinical Nurse Specialist, NHS Glasgow and Clyde conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A 34-year-old man underwent surgery for an ankle fracture. The surgical site broke down at 2 weeks, resulting in three sloughy wounds with tendon exposure. The wound remained static after 4 weeks of treatment with providone-iodine dressings and a following 2 weeks NPWT treatment (using a competitor product). The patient was a smoker, recovering alcoholic and known to have mental health conditions but no other physical conditions. The initial wound measurement was (L)5.2x(W)2.0x(D)0.2cm and 100% slough (Figure 1). The Avelle™ NPWT System, with its Hydrofiber® Technology dressing was applied safely over the exposed tendon, preventing harmful dehydration.

RESULTS

On day 4 of Avelle™ therapy, the wound had reduced to (L)4.4x(W)2.0x(D)0cm and slough reduced to 90%, at day 9 the wound measured (L)4.4x(W)1.8cm and 80% slough. At day 21 the wound measured (L)4.0x(W)1.6cm and slough 80% (Figure 2), it was determined that Avelle™ therapy was no longer required as slough remained static and exudate levels were low. Full healing was subsequently achieved with the use of standard dressings.

CONCLUSION

The nurse considered Avelle™ NPWT Dressing easy to apply and it appeared to protect the exposed tendon well. The patient commented that the Avelle™ NPWT System felt more secure than the previous NPWT device used.

Wound size reduction.

Easy to apply the Avelle™ NPWT dressing.

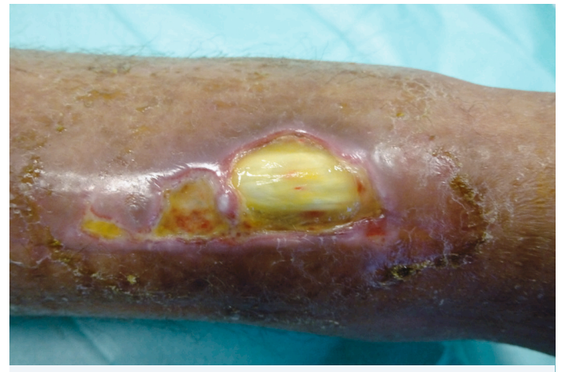


FIGURE 1

FIGURE 2

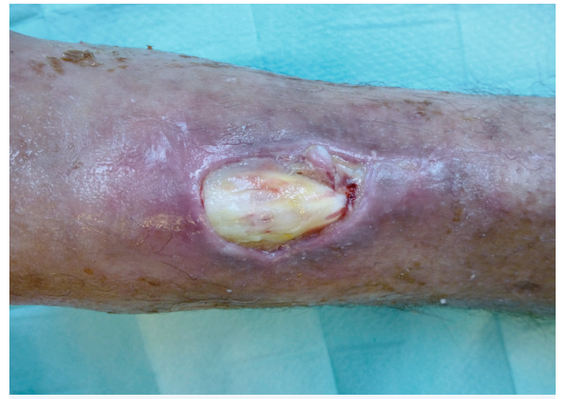


FIGURE 3

Case study:
Dehisced Ankle Wound 28-day Treatment

INTRODUCTION

Emma Sharp, Limb Reconstruction Clinical Nurse Specialist, NHS Glasgow and Clyde conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A 62-year-old man underwent surgery for an internal fixation of a fractured ankle, the surgical wound went on to become dehisced. The wound continued to deteriorate despite being managed with a hydropolymer foam dressing for 3 weeks, it was at this point that the Avelle™ NPWT System was put in place. On initial application of the Avelle™ NPWT System, the wound measured (L)3.0x(W)2.0x(D)1.0cm (Figure 1) and presented as 100% slough and moderately exuding. The peri-wound skin was mildly macerated. Clinical signs of infection were present (severe pain and purulent exudate). A Staphylococcus aureus infection was confirmed, and antibiotics prescribed.

RESULTS

At the first dressing change on, day 4, the wound measured (L)2.5x(W)2.0x(D)0.5cm, was 90% slough and 10% granulated and low exudate levels. On day 6 the wound measured (L)2.5x(W)1.5x(D)0.25cm, and the wound bed was 50% slough and 50% granulated. There was no size reduction on day 11 although, the wound bed was 70% granulated and 30% slough. Slough reduced to 10% on day 14 and 0% on day 21, when the wound was measured at (L)2.0x(W)1.0cm (Figure 2).

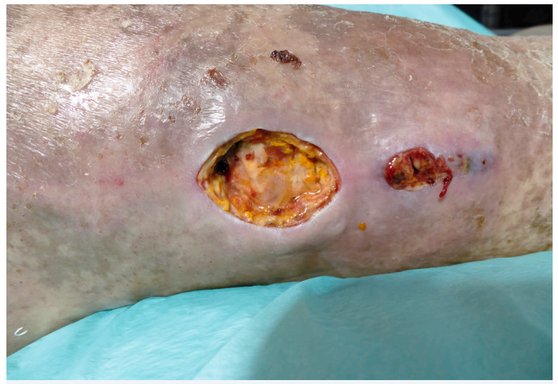


FIGURE 1

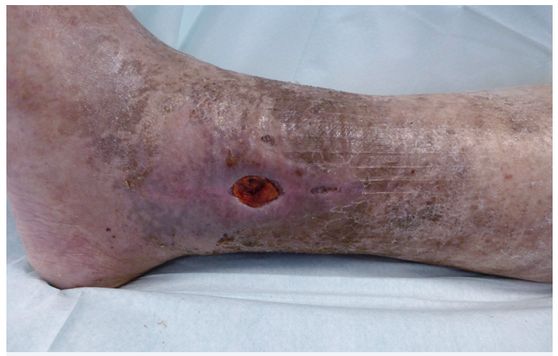


FIGURE 2

CONCLUSION

By day 21 the wound bed was 100% granulation tissue and the patient was pain free. The Avelle™ NPWT System was discontinued on day 28 and full healing was achieved a month later using standard wound dressings.

100% granulation tissue after 21 days of therapy.
Patient pain free by day 21
Significant wound size reduction.

Case study:
Dehisced Abdominal Stoma Site 20-day Treatment

INTRODUCTION

Jocelyn Taylor, a professional nurse at the SWCS Clinic in Durban, South Africa conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A case study method was adopted. A 44 year old female had an abdominal stoma closure site that dehisced. The wound had been present for 2-weeks and had been treated with Silvercel™. At the baseline assessment, the wound was infected and measured 4.5cm x 2cm x 1.2cms. The wound bed was assessed as granulating and moderately exuding. A 12cm x 21cm Avelle™ NPWT Dressing was applied to the wound. The patient who reported having a pain score of 5 on the McCaffery pain scale[1] was not taking any analgesics but was taking oral antibiotics.

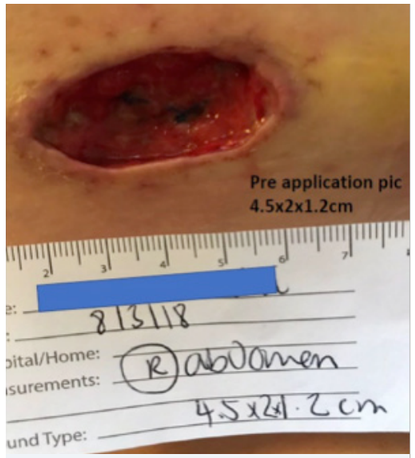


FIGURE 1

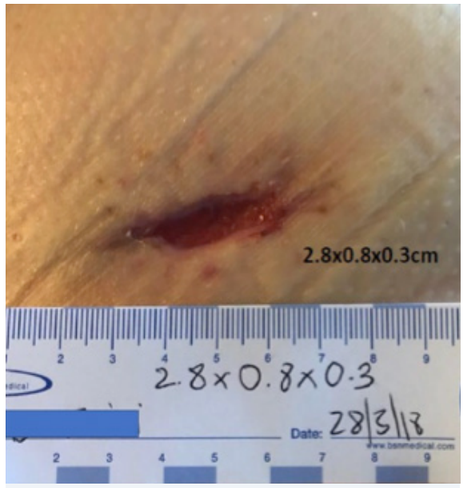


FIGURE 2

RESULTS

The patient's wound had four dressing changes and one Avelle™ NPWT Pump during the 20-day evaluation period. At the end of the evaluation, the wound had progressed sufficiently to be managed without negative pressure. The patient did not experience any pain on the application of negative pressure or during wear. The patient's overall pain scored had reduced to 3 by the end of the evaluation.

At the first dressing change, 2 days after the initial dressing application, the wound area had already reduced by over 20%. By the third dressing change, 11 days after the first application, the wound area had reduced by over 40% and at the final dressing change, 20 days after the initial dressing application the wound area had reduced by 75%.

The peri-wound skin under the dressing pad, dressing border and fixation strips remained healthy throughout the evaluation.

CONCLUSION

The use of the Avelle™ NPWT System can rapidly change the status of a static wound into a well progressing, healing wound.

75% wound reduction after 20 days of therapy.
No pain on application of the Avelle™ NPWT System.
Healthy peri-wound skin through the evaluation.

1. McCaffery M, Palermo C, Pain Clinical Manual, St. Louis 1999 page 16.

Case study:
Dehisced Incision 30-day Treatment

INTRODUCTION

Dr Angela Garrubba at the Umbertoi Hospital, Corato, Italy conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A case study method was adopted. A 56-year old male patient with a BMI of >35 underwent surgery for ulcerated diverticulitis with peritonitis. The patient suffered a Grade 1 surgical wound dehiscence[1]. The wound measured 22cm in length at the start of the evaluation. A 12cm x 31cm Avelle™ NPWT dressing was applied.

RESULTS

The patient's wound had eight dressing changes and only one Avelle™ NPWT Pump was used during the 30-day evaluation period. At the end of the evaluation, the wound had progressed sufficiently to be managed with AQUACEL™ Ag dressing.

The patient did not experience any pain on the application of negative pressure, during wear or removal of the dressing. In addition, the Clinician assessed that the wound bed and peri-wound skin did not suffer any trauma when the dressings were removed. At the first dressing change, 2 days after the first application, the exudate levels were assessed as moderate. The wound was classified as a low exuding wound after four dressing changes, approximately 3 weeks after the first application of the Avelle™ NPWT System.

The clinician rated the Avelle™ NPWT System better than other Negative Pressure Wound Therapy Systems they had used.

CONCLUSION

The Avelle™ NPWT pump and dressings were provided free of charge for this case study. The use of the Avelle™ NPWT System can rapidly change the status of a wound to a progressing wound.

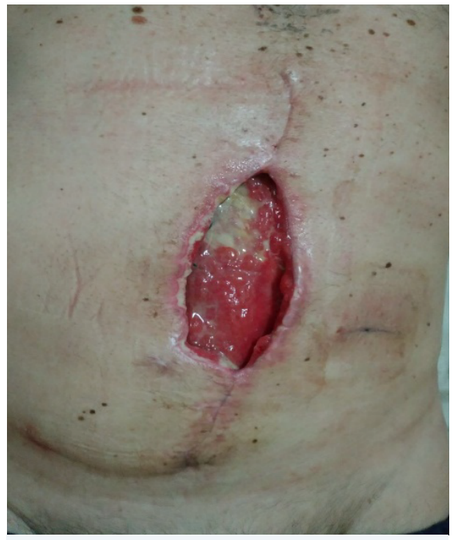


FIGURE 1

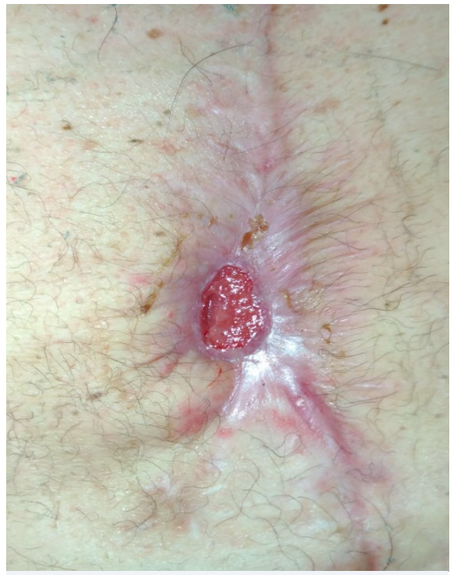


FIGURE 2

No pain on application of the Avelle™ NPWT System.
No trauma at dressing removal.
Significant wound size reduction.

1. The Sandy Grading System for Surgical Wound Dehiscence. Wounds international 2017 Vol. 8 Iss. 4, p6-10.

Case study:
Dehisced Ankle 30-day Treatment

INTRODUCTION

Dr Carmelo Massimo Misiti at the Rivniti Igreco Sede La Madonnina Orthopaedic Hospital, Italy conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A case study method was adopted. A 79-year old male diabetic patient underwent ankle surgery. Prior to commencing Avelle™ NPWT, the dehisced wound presented with Staphylococcal infection and measured 8cm in length. The wound had moderate levels of exudate. A 16cm x 21cm Avelle™ NPWT Dressing was applied.

RESULTS

The patient's wound had six dressing changes and one Avelle™ NPWT Pump was used during the 30-day evaluation period. At the end of the evaluation, the wound had progressed sufficiently to be managed without negative pressure. The patient did not experience any pain on application of negative pressure, during wear or on removal of the dressing. In addition, no trauma was reported to the wound bed or peri-wound skin on the removal of the dressing.

The peri-wound skin under the dressing pad, under the dressing border and under the fixation strips was assessed to be healthy throughout the evaluation period.

After the second dressing change, the wound was classified as a low exuding wound and the Avelle™ NPWT dressing was left in place for the maximum 7-day wear time on 4 occasions. At the end of the evaluation period, the wound had progressed sufficiently to no longer require Negative Pressure Wound Therapy.

The clinician rated the Avelle™ NPWT System better than other Negative Pressure Wound Therapy Systems they had used.

CONCLUSION

The use of the Avelle™ NPWT System can rapidly change the status of an infected wound to a progressing wound.

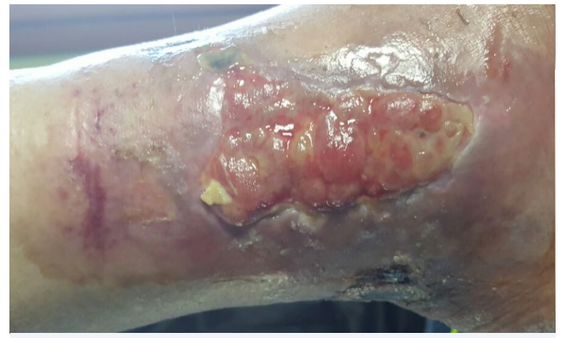


FIGURE 1

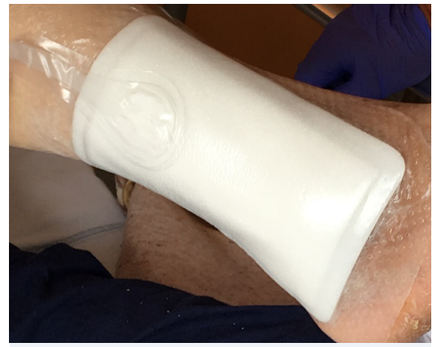


FIGURE 2

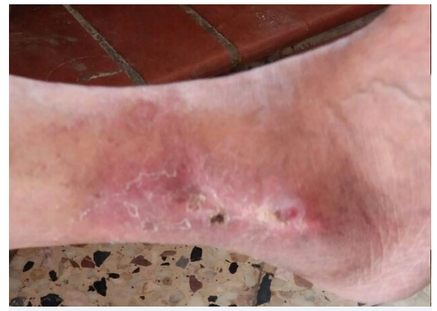


FIGURE 3

No pain and trauma at dressing change.
7-day dressing wear time.
Healthy peri-wound skin through the evaluation.

Case study:
Dehisced Tibia 28-day Treatment

INTRODUCTION

Dr Emmanuela Sanna at the Sassari Hospital, Italy conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A case study method was adopted. A 40-year old male had a surgical wound on the tibia that dehisced. At the baseline assessment, the wound was static and measured 2cm x 1cm x 0.5cms. The wound bed was assessed as sloughy and moderately exuding. A 12cm x 21cm dressing was applied to the wound. The leg was oedematous around the local wound area.

The patient reported having a pain score of 2 on the McCaffery pain scale[1] but was not taking any analgesics. The wound was not infected.

RESULTS

The patient's wound had four dressing changes and one Avelle™ NPWT Pump during the 28-day evaluation period. At the end of the evaluation, the wound had progressed sufficiently to be managed without negative pressure. The patient did not experience any pain on the application of negative pressure, during wear or removal of the dressing. In addition, the clinician assessed that the wound bed and peri-wound skin did not suffer any trauma when the dressings were removed.

At the third dressing change, 15 days after the first application, the exudate levels were assessed as low.

At the end of the evaluation, the wound bed was assessed as 90% epithelising with minimal slough (10%).

The peri-wound skin under the dressing pad and the dressing border and fixation strips was assessed to have improved during the evaluation.

The clinician rated the Avelle™ NPWT System better than other Negative Pressure Wound Therapy Systems they had used.

CONCLUSION

The use of the Avelle™ NPWT System can rapidly change the status of a wound to a progressing wound.

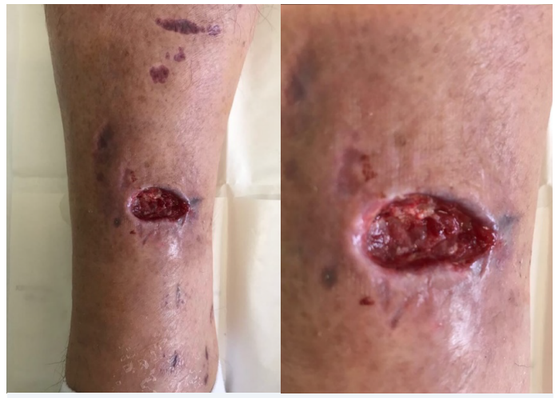


FIGURE 1

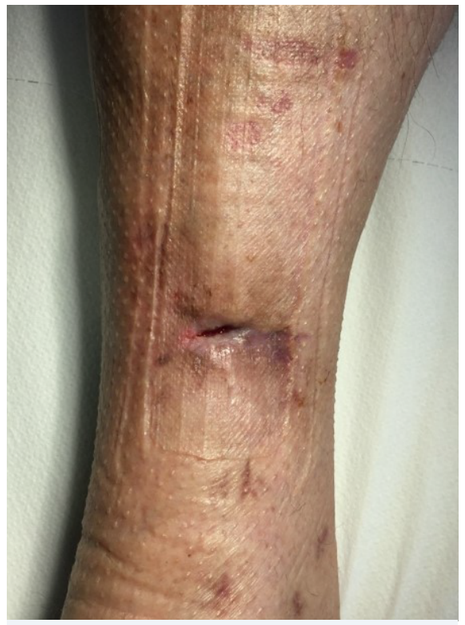


FIGURE 2

No pain during the wear and removal of the Avelle™ NPWT Dressing.

Reduction in wound bed slough.

Peri-wound skin improvement.

Significant wound size reduction.

1 McCaffery M, Palermo C, Pain Clinical Manual, St. Louis 1999, page 16.

Case study:
Dehisced Tibia and Fibular 29-day Treatment

INTRODUCTION

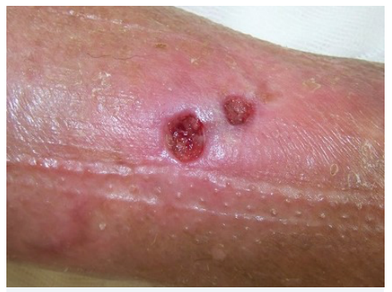
Dr Jaroslava Hepnerová, Centum Hojení Ran, Nemocnice Sokolov, Czech Republic conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A case study method was adopted. A 61-year-old female patient underwent surgery for the treatment of an open distal tibia and fibula on 9th October 2017. Sutures were removed 12 days after surgery. The wound first dehisced on 21st October 2017. Following successful management with AQUACEL™ Ag+ Extra™ dressing, the wound healed by 20th December 2017.

The patient developed a small abscess that erupted seropurulent wound fluid, resulting in wound dehiscence on the 4th January 2018. The dehiscence wound was 11cm in size, static with low levels of incisional fluid. The wound was graded IIa* using the Sandy Grading System. The peri-wound skin was erythematous prior to the application of the Avelle™ NPWT System using the 12cm x 21cm dressing. At the baseline assessment, the patient was not prescribed analgesics or antibiotics.

*Medium (singular or multiple) separations of opposed incisional margins to expose the subcutaneous >5cm depth. Bridging or tunnelling of dehiscence evident with clinical signs and symptoms and/or confirmed microbiological conformation of infection[1].



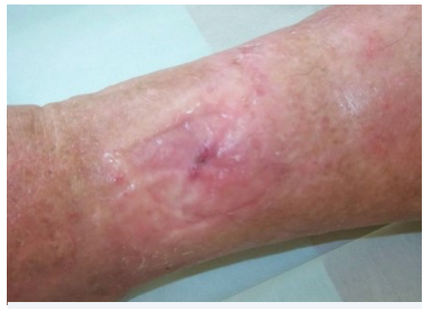
BASELINE

RESULTS

The patient underwent six dressing changes with one pump over the 29-day evaluation period. The first routine dressing change occurred 4 days after the initial dressing application and the wound status was assessed as progressing. In addition, the condition of the peri-wound skin under the dressing border and fixation strips was evaluated as healthy.

At the second routine dressing change, one week after the initial dressing application, the condition of the peri-wound skin around the incision under the dressing pad was assessed as healthy. The patient did not experience any pain during the application of negative pressure or at any of the dressing applications and subsequent dressing changes. The level of incisional fluid was assessed as low throughout the evaluation period. At the end of the 29-day evaluation period the wound was clinically assessed to have healed.

The patient expressed satisfaction that the wound had finally healed. The clinician rated the Avelle™ NPWT System better than other Negative Pressure Wound Therapy Systems they had used.



ON COMPLETION OF THE EVALUATION

CONCLUSION

The use of the Avelle™ NPWT System can rapidly change the status of a static wound to a progressing wound.

No pain during dressing application or removal.

Wound healed at the end of the evaluation.

[1]The Sandy Grading System for Surgical Wound Dehiscence. Wounds international 2017 Vol. 8 Iss. 4, p6-10.

Case study:
Dehisced Acute Surgical Wound 28-day Treatment

Danielle Spillane
Plastic Clinical Nurse Specialist, Bons Secour Hospital, Tralee, Co Kerry

KEY POINTS

- A dehisced abdominal surgical wound was managed with the Avelle™ NPWT System for 28 days
- 7-day dressing wear time enabled minimal dressing changes with associated cost savings for product use and nurse time
- Only one Avelle™ NPWT Pump was needed for the 28 days of therapy
- The patient reported that she:
  'found it user friendly'
  'was glad to have had it'
  'felt it quickened her recovery/healing time'

THE PATIENT

A 35 year old female patient with no past medical history. She had undergone elective abdominoplasty surgery under the Plastics team and had an uneventful post operation.

THE WOUND

Approximately 5 weeks post operation the patient contacted the Plastics team with concerns regarding her wound. She reported an increase in exudate and redness to the lateral side of her incision site (Figure 1). On presentation to the Plastics Clinic two days later the wound had further deteriorated and begun to dehisce on the far-left side of the abdominoplasty (Figure 2).

There were small pinhole wounds present, the largest measuring 1.2cm x 0.8cm x 1.1cm with undermining of 1.8cm noted (Figure 2). However, no infection was noted and the patient had no pain issues. It was diagnosed as fat necrosis.

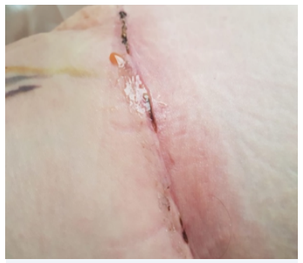


FIGURE 1

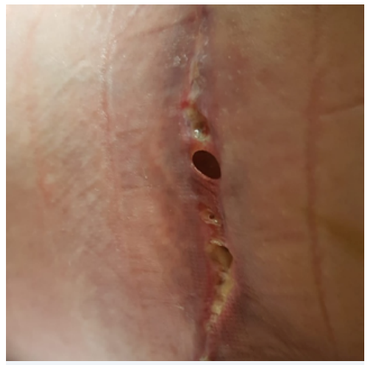


FIGURE 2

MANAGEMENT

Due to the deterioration in the patients wound and the risk of further wound breakdown, NPWT was considered appropriate and the Avelle™ NPWT System was applied using the 12x21cm size dressing.

The patient was a young mother of 4 small children and needed to remain active and mobile. A portable, canisterless system was ideal. On commencement of NPWT, the exudate levels were moderate, so the wound was filled with AQUACEL® Extra dressing.

The first dressing change was the maximum 7 days and she reported no pain. At this point the undermining had fully healed (Figure 3).

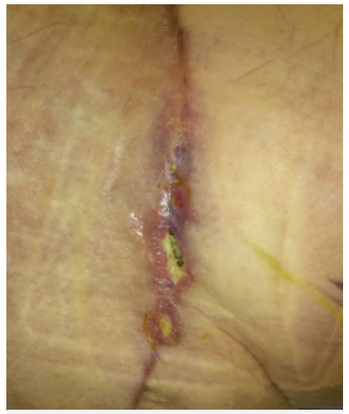


FIGURE 3

As the wound progressed, many of the smaller wounds along the suture line fully healed. The main wound was open, and wider, but with 100% clean, granulation tissue (Figure 4). One of the main benefits of the Hydrofiber® Technology is the ability to debride, which is very clearly shown in this case study when comparing Figure 3 and Figure 4.

AQUACEL® Extra as a filler was maintained for the first two dressing changes then discontinued as exudate levels decreased to minimal.

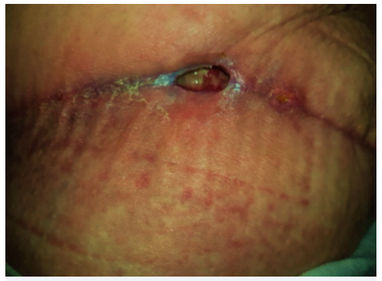


FIGURE 4

Exudate was well managed within the Hydrofiber® Technology dressing (Figure 5). The patient continued to attend the Plastics OPD clinic for dressing changes every 7 days. This was beneficial for her, as she lived a 4-hour car journey away from the hospital. Once-weekly dressing changes were practical and economical for the patient, her family and the hospital. The patient reported no pain on dressing changes and required no analgesia.

There was no reported maceration to the peri skin area, and the peri wound skin remained healthy and intact. Some dryness and itchiness were reported by the patient, perhaps due to the fixation strips, as they remained in situ for 7 days.

FIGURE 5

The last Avelle™ NPWT dressing was removed by the Plastic CNS on on day 28 of treatment. The wound showed further improvement and measured 0.9cm x 0.2cm x 0.1cm (Figure 6). At this stage the wound required a simple dressing to maintain moist wound healing.

WOUND PROGRESSION

Day 1	Avelle™ commenced, 1.2cm x 0.8cm x 1.1cm
Day 7	1st dressing change, 1.2cm x 0.8cm x 1.8cm Undermining – 1.8cm
Day 14	2nd dressing change, 1.3cm x 0.7cm x 0.4cm No undermining
Day 21	3rd dressing change, 1.5cm x 0.6cm x 0.2cm
Day 28	Avelle™ discontinued, 0.9cm x 0.2cm x 0.1cm

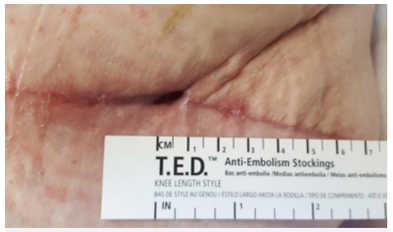


FIGURE 6

DISCUSSION

The patient was treated with the Avelle™ NPWT System for 28 days and had a total of 4 dressing changes in that time. The wound exudate had been successfully managed, leaving the peri wound skin intact and healthy. Most importantly, the wound had decreased in size to negate a wick or packing and now required a simple, inert dressing. The wound continued to heal to complete closure.

The patient and the Healthcare Professionals were pleased with the outcome. Figure 7 illustrates the full surgical incision.

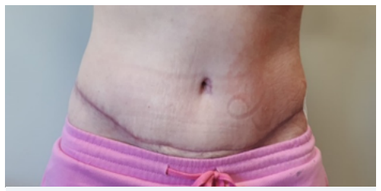


FIGURE 7

Case study:
Skin Grafts 29-day Treatment

Danielle Spillane
Plastic Clinical Nurse Specialist, Bons Secour Hospital, Tralee, Co Kerry

KEY POINTS

- One pump delivered therapy for 29 days
- 7-day dressing wear time enabled minimum disruption to the wound bed and peri-wound skin, which remained in good condition throughout
- There was no change to the periwound skin under the dressing border and fixation strips'
- The patient described the Avelle™ NPWT System as 'very user friendly. Did not feel it was a burden. Comfortable to wear.'

THE PATIENT

A 72 year old female with a past medical history of hypertension, osteopenia and fibromyalgia. She was morbidly obese weighing 134kg.

THE WOUND

The patient had been diagnosed with two squamous cell carcinoma (SCC) on her right lower leg and had undergone excision surgery. 2 large open wounds were closed post-operatively with the formation of split skin grafts (SSG).

MANAGEMENT

The decision was made pre-operatively by the Plastics team to use the Avelle™ NPWT System to encourage better graft uptake.

On day 7 (the maximum wear time for the dressing), removal of the Avelle™ NPWT Dressing revealed that both the SSGs had failed uptake (Figure 1). The wounds were debrided resulting in two large cavity wounds (Figure 2). The exudate level was low and the peri wound skin healthy and intact.

Wound dimensions:
Right Lateral Wound A: 3cm x 3.5cm x 0.5cm
Right Posterior Wound B: 4cm x 3cm x 0.5cm

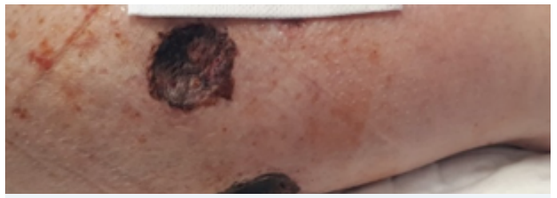


FIGURE 1

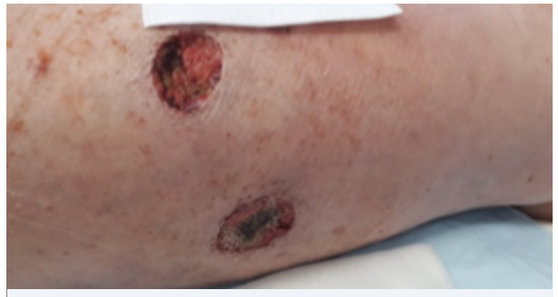


FIGURE 2

The decision was made to continue using the Avelle™ NPWT System due to co-morbidity factors that could contribute to reduced wound healing (morbid obesity and dependent oedema). The 30-day lifespan of the Avelle™ NPWT Pump meant the same device could be used to continue treatment. Aims were to encourage healing in both wounds and decrease oedema in the wound and surrounding tissue.

One 16 x 21cm dressing was used to cover both wounds (Figure 3).

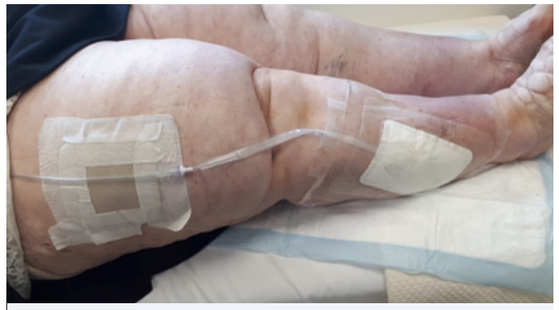


FIGURE 3

After another 7 days there was visible improvement in the wound bed and a decrease in wound dimensions.

The patient reported no pain on dressing change. The peri wound skin remained healthy and intact and there was no issue with peri wound maceration. Dressing changes continued weekly.

WOUND PROGRESSION UNDER NPWT

Day 1	Avelle™ NPWT System commenced Wound A: 3cm x 3.5cm x 0.5cm Wound B: 4cm x 3cm x 0.5cm.
Day 7	Wound A: 3cm x 3.5cm x 0.5cm Wound B: 4cm x 3cm x 0.5cm
Day 14	Wound A: 3cm x 3.5cm x 0.3cm Wound B: 4cm x 3cm x 0.3cm
Day 21	Wound A: 3cm x 3.5cm x 0.2cm Wound B: 4cm x 3cm x 0.2cm
Day 29	Wound A: 2.5cm x 3.5cm x 0cm Wound B: 3.5cm x 2.3cm x 0cm Avelle™ NPWT System discontinued

The 4th Avelle™ NPWT Dressing was removed on day 29. Both wounds were reviewed and showed further improvement. Wound A showed a decrease in size and an increase in granulation tissue (Figure 4). Wound B also showed a visible size reduction and a decrease in necrotic tissue (Figure 5). Avelle is contraindicated for use on nectrotic wounds, therefore off-label use

At this stage the decision was made to manage both wounds with a conventional dressing and NPWT was discontinued. Both wounds continued to heal to complete closure.

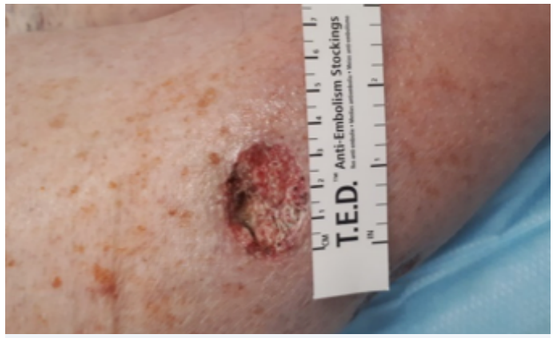


FIGURE 4

DISCUSSION

Although both grafts failed, due to its 30-day usage the Avelle™ NPWT Pump could still be utilised to manage the open wounds without incurring the cost of additional pumps.

The 16 x 21cm dressing was able to deliver NPWT to both wounds; encouraging wound progression whilst decreasing the oedema and exudate.

The exudate was managed well by the Hydrofiber® Technology dressing, allowing the maximum dressing wear time of 7 days. This had the additional benefit of causing little disruption to the wound by more frequent dressing changes.

The patient benefitted from only weekly patient visits for dressing changes. Dressing changes were atraumatic for the patient, due to the silicone border adhesive of the dressing. Also, the peri wound skin remained healthy and intact throughout the evaluation.

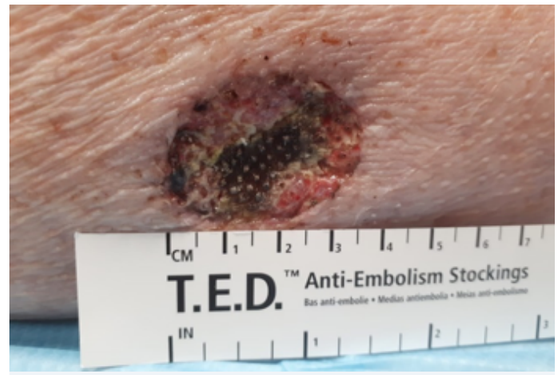


FIGURE 5

7-day dressing wear time.

Atraumatic dressing changes.

Healthy peri-wound tissue at the end of the evaluation.

Wound size reduction and increase in granulation tissue.

Case study:
Dehisced Lower Limb 16-day Treatment

Michael Ellis
Tissue Viability Nurse, Plymouth Hospitals NHS Trust

KEY POINTS

- Surgery for a haematoma caused by traumatic injury resulted in wound dehiscence. Two skin grafts failed, so the wound was left to heal by secondary intention
- The patient had multiple complex co-morbidities which contributed to delayed healing
- The wound had been present for four weeks when the Avelle™ NPWT System was started
- The patient was pleased with the progress his wound made using the Avelle™ NPWT System, finding it comfortable and quiet to use
- Only one Avelle™ NPWT Pump was required to support 2 episodes of NPWT for a total of 16 days.

THE PATIENT

66-year-old male presented with a hard to heal wound to the right leg present for 4 weeks.

Presenting co-morbidities included philiarisis, chronic regional pain syndrome, chronic kidney disease, osteoarthritis, pulmonary embolism and Waldestrom's macroglobulinaemia.

THE WOUND

On initial assessment, the wound measured 23cm x 4cm x 0.5cm. The wound bed consisted of approximately 95% granulation and 5% slough (Figure 1). The patient reported wound-associated pain as measuring a 6 (using a scale of 0–10 where 0= no pain and 10 the worst pain possible).

The wound was the result of a traumatic injury which, following the formation of a haematoma, required surgical debridement and closure by suturing. Post-surgery, the wound dehisced resulting in the need for skin grafting, which failed. A second graft also resulted in failure, so the patient was admitted to hospital and his wound was surgically debrided and NPWT started*. This was then stepped-down to a disposable, single-use NPWT system†.

CHALLENGES PRE NPWT APPLICATION

Peri wound area - excoriation and erythema.

MANAGEMENT

The clinician applied a barrier cream∞ around the peri-wound area before NPWT was commenced using the Avelle™ NPWT System, in conjunction with compression.

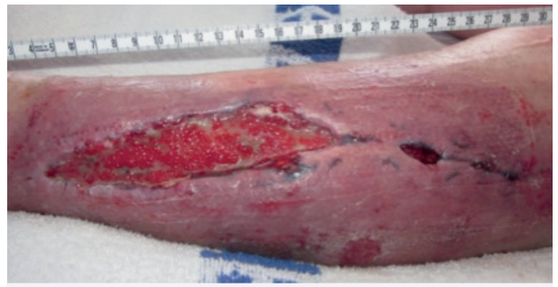


FIGURE 1 - Wound on day 1

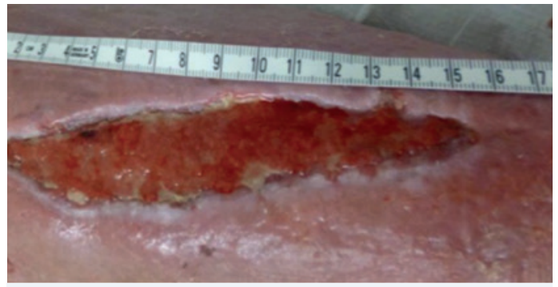


FIGURE 2 - Wound on day 7

WOUND PROGRESSION

Day 1 23cm x 4cm x 0.5cm

Day 5 Evidence of some distal leakage of exudate and the appearance of the granulation tissue was raised and bumpy, possibly because of excess moisture. Avelle™ NPWT System continued due to positive response from patient.

Day 7 13.5cm x 3.5cm, the edges had significantly improved and there was a reduction in exudate (Figure 2). Granulation normal in appearance.

Evidence of blistering of the peri-wound skin and the patient reported stinging around the wound site and the leg in general. This appeared to be the overall fragile oedematous condition of the skin, rather than a result of NPWT. The Avelle™ NPWT System was discontinued to allow the fragile peri-wound skin to recover. The wound was dressed using AQUACEL® Extra™ dressing (ConvaTec) and covered with a secondary dressing**.

Day 12 The Avelle™ NPWT System was resumed. The dressing was changed on day 14 (Figure 3), and day 16.

Day 18 13.5cm x 2.5cm (Figure 4).

Day 21 Removal of the Avelle™ NPWT System – wound on healing trajectory.

Despite multiple co-morbidities, the wound healed from the base upwards and the wound edges advanced rapidly. The patient received a total of 16 days of NPWT during which time the wound made progress and the patient's pain levels decreased in line with healing; from 6 to 2. Only one pump was needed for the duration of treatment, presenting an advantage over other single-use disposable NPWT systems available.

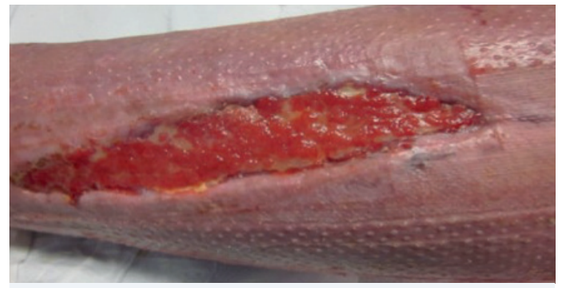


FIGURE 3 - Wound on day 14

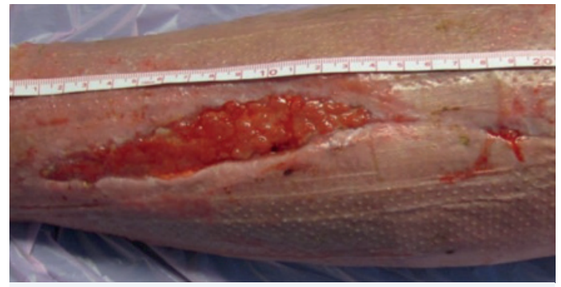


FIGURE 4 - Wound on day 18

CONCLUSION

- The Avelle™ NPWT System supported the healing of a complex static wound of a patient with multiple comorbidities
- The Hydrofiber® Technology wound contact layer in the Avelle™ NPWT Dressing provided fluid handling that prevented lateral spread of exudate on the peri-wound skin
- The wound responded rapidly with a marked reduction in depth
- Total NPWT time was 16 days
- Pain levels reduced from 6 to 2
- Patient satisfaction remained high throughout therapy
- 1 pump was needed for a total of 21 days. This included 16 days NPWT and a break in therapy for 5 days

* RENASYS (Smith & Nephew)
† PICO (Smith & Nephew)
∞ Medi Derma S barrier cream (Medicareplus)
** Zetuvit® (Hartmann)

Case study:
Traumatic Wound 26-day Treatment

Geraldine Byford
Senior Specialist Nurse; Complex Wound Service, University Hospital South Manchester NHS Trust

KEY POINTS

- A traumatic leg wound previously left to heal by secondary intention was managed using the Avelle™ NPWT System for 26 days
- 7-day dressing wear time enabled minimum disruption to the wound bed and peri-wound skin, which remained in good condition throughout
- 7-day dressing wear time also meant a reduced frequency of dressing change with associated cost savings for product use and nurse time
- Only one Avelle™ NPWT Pump was needed for the 26 days of therapy, which represented an advantage over other available portable NPWT systems
- The patient was delighted with his wound's progress and described the Avelle™ NPWT Pump as 'comfortable, quiet and small'.

THE PATIENT

A 39-year-old male had a motorcycling accident while on holiday. On his return home, his right leg became bruised and swollen, with the site bursting open to reveal a haematoma. The resulting wound was subsequently debrided and left to heal by secondary intention.

THE WOUND

At presentation, the wound duration was four weeks and was failing to progress. The wound measured 8cm x 4cm x 1.5cm, was covered in 100% granulation tissue and was producing a moderate volume of exudate. Overall, the peri-wound skin was in a healthy condition (Figure 1).

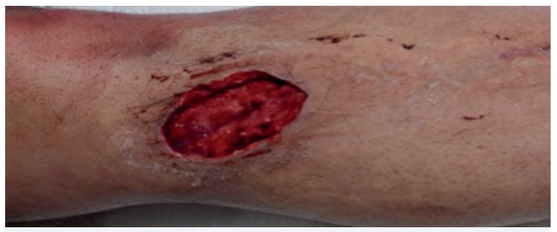


FIGURE 1 - Wound on presentation

The wound was managed using AQUACEL™ dressing, held in place with melanin, wool and crepe. The patient reported a moderate level of wound-related pain, measuring 5 on a scale were 0=no pain, 10=worst possible pain. Pain which was being managed using codeine and paracetamol.

MANAGEMENT

Following holistic patient assessment, a decision was taken to manage the wound using NPWT. Due to wound depth of 1.5cm the wound was filled using gauze* (Figure 2), covered with an Avelle™ NPWT Dressing and the Avelle™ NPWT System was applied. The initial application of the dressing and pump was very easy. The patient did not feel any pain on dressing or when negative pressure was applied.

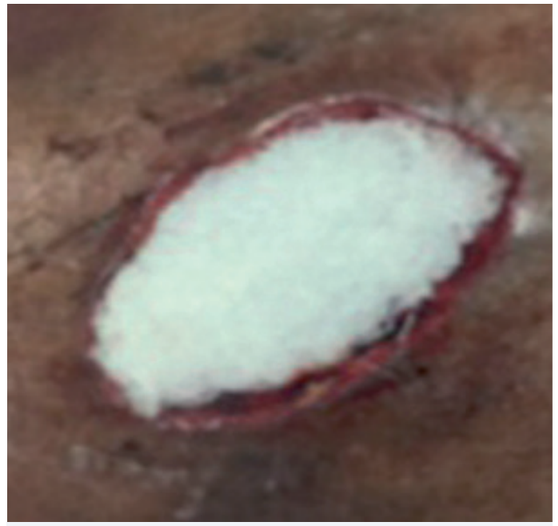


FIGURE 2 - Wound filled with AMD gauze

WOUND PROGRESSION

Day 1	8cm x 4cm x 1.5 cm 100% granulation tissue.
Day 5	6cm x 3cm x 0.7cm Wound depth had halved. Fluid handling was excellent, with the peri-wound skin remaining in good condition.
Day 12	5.5cm x 2.5cm x 0.5cm Weekly dressing changes from today
Day 19	5cm x 2cm x 0.25cm (Figure 3).
Day 26	5cm x 2cm x 0cm The wound was on a healing trajectory and NPWT was discontinued (Figure 4). A total of 4 dressings were used.

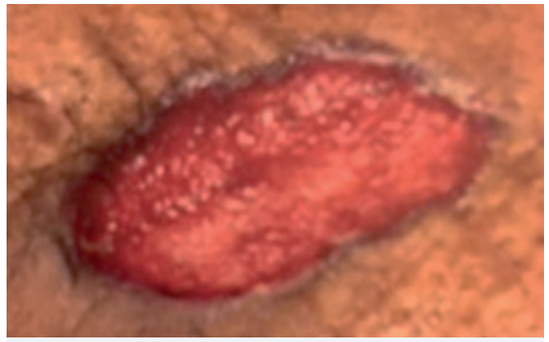


FIGURE 3 - Wound on day 19

DISCUSSION

The Avelle™ NPWT System can be used to kick start wound healing, and achieve rapid wound contraction. The excellent fluid handling ability of the Avelle™ NPWT dressing meant that dressing changes were needed only every seven days from day 5, resulting in minimal disruption to the wound bed and peri-wound skin. The dressing kept the wound exudate locked away, preventing maceration and promoting a moist wound healing environment. At each dressing change, the Avelle™ NPWT Dressing was removed in one piece, and was removed easily without causing trauma to the skin.

The pump performed well, delivering 26 days of NPWT with no difficulties. This represented a significant advantage over other battery powered disposable NPWT systems which deliver a maximum of seven days of therapy before a new pump is required.

The patient was happy with his wound's progress and reported no pain during the wear-time of the Avelle™ NPWT System, on application of negative pressure, or during dressing changes throughout the evaluation. He described the Avelle™ NPWT System as 'comfortable, quiet and small' illustrating key benefits of the device whilst enhancing patient well-being and quality of life.

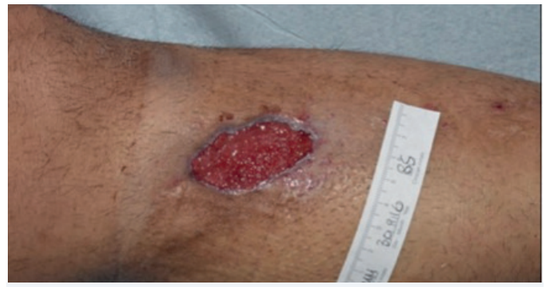


FIGURE 4 - Wound on day 26

COST OF THE AVELLE™ NPWT SYSTEM

Avelle™ NPWT Pump	**£99**
Number used:	1
Cost per pump:	£99
Avelle™ NPWT Dressings	**£120**
Number used:	4
Cost per box of 5:	£120
Total Cost 26 days NPWT	**£219**
Gauze* *11.4cm x 3.7m roll*	**£1.62**
Prices as per October Drug Tariff 2017	

* Kerlix™ Gauze, Medtronic

Case study:
Venous Leg Ulcer 56-day Treatment

INTRODUCTION

Mr Y Blaettler, Nurse Coordinator at the Oeuvre Schyrr in Hochstatt, France conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A case study method was adopted. A female patient with presented with a venous leg ulcer present for 7 years. The wound had been previously treated with AQUACEL™ Extra, AQUACEL™ Foam dressings and Urgo K2® compression bandaging. On 7th June 2017, the Avelle™ NPWT System was applied using the 16cm x 21cm dressing. Prior to the dressing application, the wound measured 6.5cm x 4.5cm x 0.25cm and presented with moderate levels of exudate and was granulating. The peri-wound skin was assessed to be healthy.

RESULTS

After 19 dressing changes, one replacement pump and 56 days of treatment, the wound had sufficiently progressed to be treated with AQUACEL™ Extra and AQUACEL™ Foam. The subject experienced no pain on the application of the system, during wear and only a small amount of pain (score 1 on the EVA scale) upon dressing removal. At the end of the evaluation period, the level of granulating tissue present in the wound bed had increased and the condition of the wound and peri-wound skin had improved.

The clinician recommended the use of the Avelle™ NPWT System.

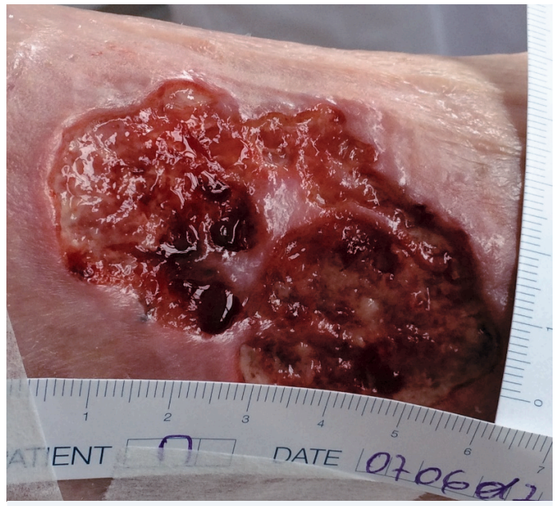


FIGURE 1

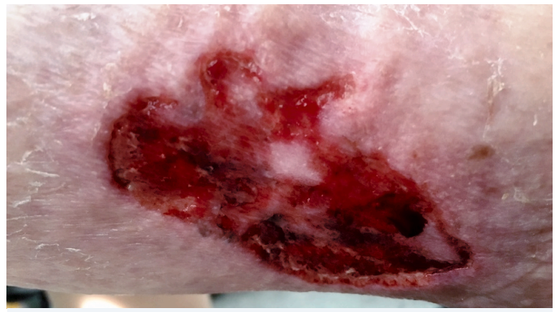


FIGURE 2

CONCLUSION

The use of the Avelle™ Negative Pressure Wound Therapy System can progress wounds towards healing, thus allowing wound management to be continued with other dressings such as AQUACEL™ Extra and AQUACEL™ Foam.

No pain during wear of the Avelle™ NPWT System.

Increased granulation tissue by the end of the evaluation.

Peri-wound skin improvement.

Case study:
Mixed Aetiology Leg Ulcer with Punch Skin Grafts 7-day Treatment

INTRODUCTION

Dr Traisac, Dr P Bandon, Dr P Toussaint Chronic Wound Centre, Bagatelle, Bordeaux, France conducted the following evaluation to establish the efficacy of the Avelle™ NPWT System.

METHOD

A case study method was adopted. A male 84-year-old patient with presented with a mixed arterial and venous leg ulcer which had been present for many months. The wound had been previously managed with AQUACEL™ dressings. On 7th November 2017, the patient had a punch skin graft performed after which the Avelle™ Negative Pressure Wound Therapy System was applied using the 16cm x 21cm dressing. Prior to dressing application, the wound measured 8cm x 7.5cm and consisted of 30% fibrous and 70% granulating tissue.

RESULTS

After 7 days of negative pressure therapy and 2 dressing changes, the wound had sufficiently progressed to be treated with Urgostart®. The subject experienced a pain score of 2 (EVA Scale) on the application of negative pressure and the removal of the dressing. No pain was experienced during wear. At the end of negative pressure wound therapy, 80% of the punch grafts had taken, which is higher than would normally be achieved using standard care.

The clinician recommended the use of the Avelle™ NPWT System.

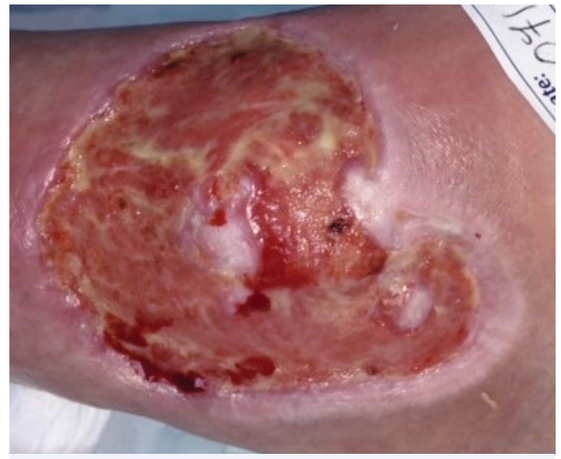


FIGURE 1

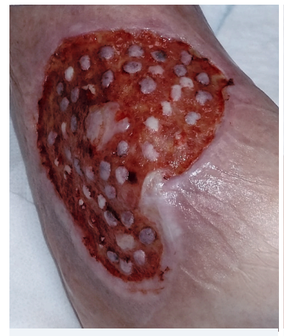


FIGURE 2

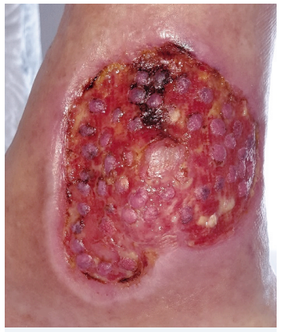


FIGURE 3

CONCLUSION

The use of the Avelle™ NPWT System can progress challenging wounds such as a punch skin graft to progress towards healing.

No pain during wear of the Avelle™ NPWT System.

80% of punch grafts taken at the end of negative pressure wound therapy.

Case study:
Mixed Aetiology Leg Ulcer 26-day Treatment

Fleur Clohesy
District Nurse, South Network District, North Lincolnshire & Goole NHS Foundation Trust

KEY POINTS

- A patient with a palliative diagnosis of primary cancer of the bladder was referred with three static pre-tibial leg ulcers of mixed aetiology
- The patient's oncologist was concerned amputation would be needed if healing did not progress
- The Avelle™ NPWT System was used to kick start healing
- The patient was delighted with the rapid progress of wound healing using the Avelle™ NPWT System, allaying his amputation fears
- The wounds' progress allowed the Avelle™ NPWT System to be stepped-down to wound management using AQUACEL® Foam dressing to protect the fragile new tissue.

THE PATIENT

A 63-year-old male with a palliative diagnosis of primary cancer of the bladder presented with three static pre-tibial leg ulcers of mixed aetiology on his lower limb. The patient's oncologist was concerned that, given the patient's overall poor health, if the wounds did not start to improve, the patient may be at risk of amputation. The patient was being managed in his own home.

THE WOUND

On initial assessment, the largest of the 3 wounds measured approximately 1.5cm x 1.0cm x 0.2cm deep. The wound beds consisted of approximately 60% granulation tissue and 40% slough, and were producing a moderate volume of exudate. The peri-wound skin was intact and of normal appearance (Figure 1).

The wounds were being managed using honey, with an absorbent dressing pad as a secondary dressing*. Wadding and crepe layer bandaging** were applied over the top. Despite this regime the wounds were static. Dressing changes were needed every 3–5 days. The patient reported a moderate amount of wound-related pain, rating it as a '6' on a scale of 0–10 (where 0 = no pain, 5 = moderate pain and 10 = worst pain possible).

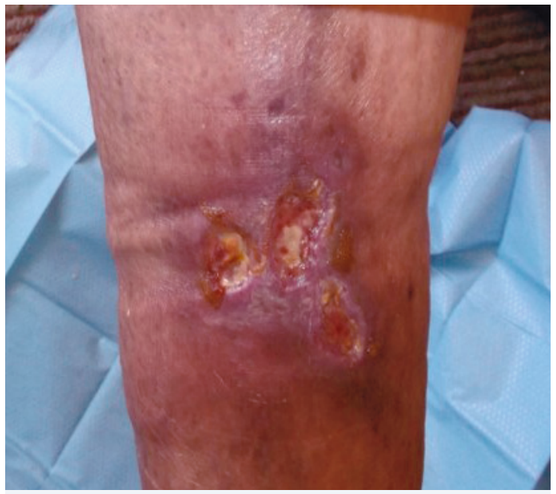


FIGURE 1 - Wounds on day 1

MANAGEMENT

The wounds were irrigated using wound cleanser∞, then the Avelle™ NPWT System was started, using a 16cm x 16cm Avelle™ NPWT dressing. The dressing and the Avelle™ NPWT pump were easy to apply and a good seal was obtained (Figure 2).

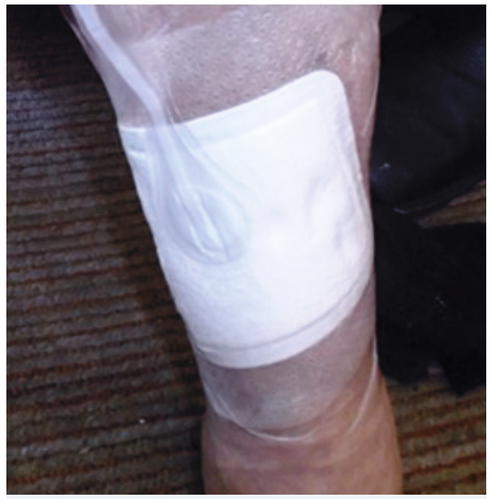


FIGURE 2 – Avelle™ Dressing in situ delivering negative pressure

WOUND PROGRESSION

Day 3	1.3cm x 0.8cm x 0.1cm 80% granulation tissue
Day 8	1.2cm x 0.6cm x 0.1cm 100% granulation tissue (Figure 3)
Day 11	0.9cm x 0.6cm x 0.1cm 100% granulation tissue. NPWT stopped.
Day 15	NPWT resumed due to wound deterioration.
Day 22	Epithelial tissue present A total of 7 dressing dressings were used.
Day 29	NPWT stopped (Figure 4)

Throughout therapy, the patient reported a reduction in pain, and was delighted to see such rapid improvement, which then impacted on his fears around possible amputation.

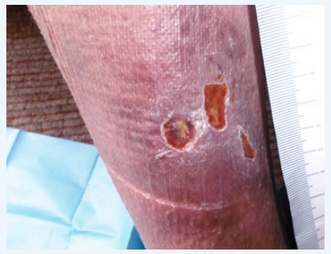


FIGURE 3 –
Wounds on day 8

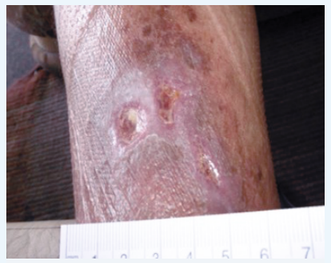


FIGURE 4 – Wounds on day 29.
NPWT stopped

DISCUSSION

The Avelle™ NPWT System was successful in getting the patient's wounds back on a healing trajectory, reducing them in size until NPWT could confidently be stopped and AQUACEL® Foam dressing applied.

One pump was needed for a total of 29 days. This included 26 days of NPWT, and a break in therapy for 3 days; providing cost effective disposable NPWT.

Throughout the evaluation, the peri-wound skin remained healthy, the dressing was easily removed, and there was no visible skin damage caused by the Avelle™ NPWT System, dressings or adhesive strips.

Wound exudate was handled well by the Avelle™ NPWT Dressing, another factor contributing to the peri-wound condition.

Of great importance, the patient could receive care in his own home and was delighted with the rapid progress of wound progression using the Avelle™ NPWT System.

COST OF THE AVELLE™ NPWT SYSTEM

Avelle™ NPWT Pump	**£99**
Number used :	1
Cost per pump:	£99
Avelle™ NPWT Dressings	**£150**
Number used:	7
Cost per box of 5:	£75
Total Cost *26 days NPWT delivered over 29 days*	**£249**
Prices as per October Drug Tariff 2017.	

CONCLUSION

- The Avelle™ NPWT System reduced wound size by 95% in 22 days
- One wound showed signs of epithelial tissue by day 22
- Patient reported a decrease in pain levels throughout therapy (from 6 to 0)
- Dressing changes were unproblematic and a good seal was maintained
- Significant benefits for the well-being of the patient
- Excellent fluid handling with the Avelle™ NPWT System
- The 30-day pump lifespan allowed for a break in NPWT without the need to purchase a new pump

*Medihoney® (DermaSciences) Zetuvit® (Hartmann) ** K-soft wadding Urgo K2 Lite (Urgo Medical) ∞prontosan † Biatain® Silicone (Coloplast)

Ordering Information

Avelle™
Negative Pressure Wound Therapy System

Avelle™ NPWT System			
Description	Product Code	Pack Size	Pad Size
Avelle™ NPWT Pump	421551	1	N/A
16 x 16 cm	421552	5	8 x 8 cm
16 x 21 cm	421553	5	8 x 13 cm
12 x 21 cm	421554	5	4 x 13 cm
12 x 31 cm	421555	5	4 x 23 cm
12 x 41 cm	422155	5	4 x 33 cm
21 x 26 cm	422156	5	13 x 18 cm
26 x 26 cm	422157	5	18 x 18 cm
Pump Carry Bag	446650	1	N/A
All dressing pouches include x6 Adhesive Film Fixation Strips			

AQUACEL® Extra™

Use the Avelle™ NPWT System with AQUACEL® Extra

AQUACEL® Extra dressings have **all of the** key benefits you expect with Hydrofiber® Technology and can now be combined with the Avelle™ NPWT System for patients with deeper wounds up to 2cm.

AQUACEL® Extra Dressings – Powered by Hydrofiber® Technology for every day management of exuding wounds.		
Size	Product Code	Pack Size
5 x 5 cm	420671	10
10 x 10 cm	420672	10
15 x 15 cm	420673	5
4 x 10 cm	420820	10
4 x 20 cm	420821	10
4 x 30 cm	420822	10
AQUACEL® Ribbon Dressing		
1 x 45 cm	420127	5
2 x 45 cm	403770	5

ConvaTec