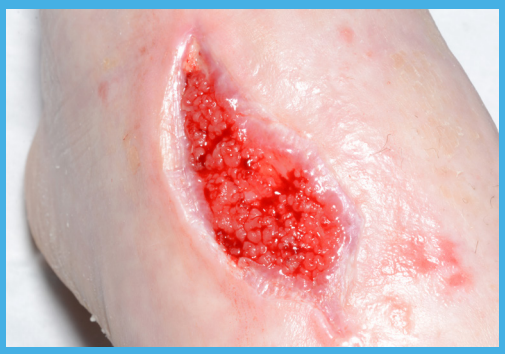
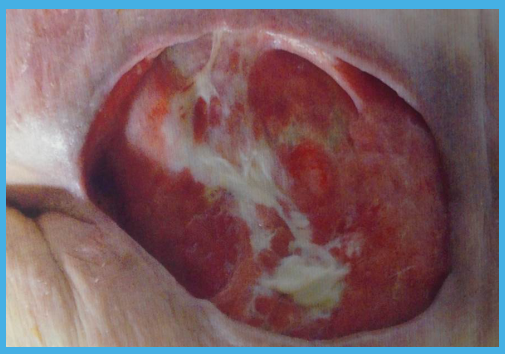
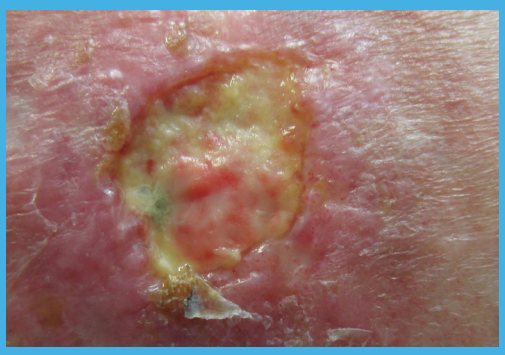
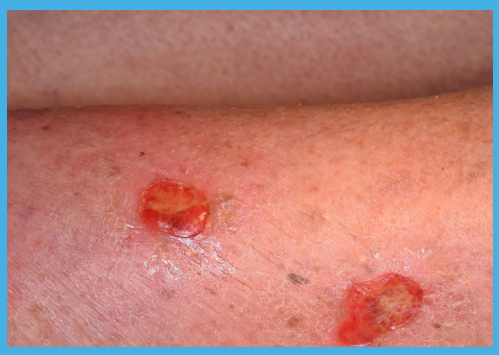
INTERNATIONAL
CASE STUDIES

Case series evaluation

TIELLE™ Hydropolymer foam dressings in practice

CASE STUDIES SERIES 2016

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Box 1. Indications for use of TIELLE Silicone Border[12]

TIELLE Silicone Border is suitable for use on fragile skin and sensitive periwound skin, including low to highly exuding wounds:

- lower-extremity ulcers (venous, arterial, mixed aetiology)
- pressure ulcers
- diabetic ulcers
- donor sites
- traumatic and post-surgical wounds.

It is suitable for use under compression bandaging

Case series evaluation: TIELLE™ Hydropolymer foam dressings in practice

This case study booklet describes the use of TIELLE Silicone Border and TIELLE Non Adhesive in the management of a variety of chronic wounds and in patients with complicating factors. Many of the patients were experiencing acute, high levels of wound-related pain, exudate levels and decreased quality of life as a result of both the wounds and their previous treatments. TIELLE Silicone Border and Non Adhesive were chosen in each case after thorough, holistic assessments of the patients and wounds included in the evaluation, in order to meet the unique needs of the patient group. Overall, the dressings presented high levels of performance along with significant improvements in quality of life, and high levels of satisfaction with treatment for both clinicians and patients.

INTRODUCTION

Patients living with chronic wounds are concerned with more than just the healing of the wound, because the "impact of living with a wound is complex and multifactorial"[1]. Although clinicians often focus on healing as a key outcome measure, it can be just as important to help the patient manage the condition in a way that allows them to live a 'normal' life in which they can more easily carry out everyday activities. For example, patients may prioritise being able to shower or bathe without having to undergo dressing change, reducing wound- and dressing-change-related pain, covering strikethrough, or being able to wear normal items of clothing or shoes[1]. In wounds of long duration, patients often become accustomed to living with it as they would diabetes or vascular disease, so they desire to maximise quality of life within the context of having a chronic wound.

In addition, anxiety and depression may result from delayed healing of wounds[2–4], while poor symptom management can cause patients to become non-concordant with therapy[5–7]. Strong evidence indicates that actively involving patients in their care, to address their priorities, improves outcomes and helps patients feel more independent and in control of their care[8–11]. It is therefore important to account for this more holistic view — that of patient 'wellbeing' — when managing a wound, particularly one of long duration[1].

Box 2. Indications for use of TIELLE Non Adhesive[19]

TIELLE Non Adhesive is suitable for use on fragile skin and sensitive periwound skin, including low to highly exuding wounds:

- lower-extremity ulcers (venous, arterial, mixed aetiology)
- pressure ulcers
- diabetic ulcers
- donor sites
- traumatic and post-surgical wounds.

It is suitable for use under compression bandaging

INTRODUCING THE NEW TIELLE HYDROPOLYMER FOAM DRESSINGS WITH LIQUALOCK™ ADVANCED ABORSOPTION TECHNOLOGY

The TIELLE range of dressings used in this evaluation were TIELLE Silicone Border and TIELLE Non Adhesive.

TIELLE Silicone Border is a soft, conformable foam dressing that combines LIQUALOCK Advanced Absorption Technology with a new soft silicone adhesive in order to maintain an optimal healing environment and allow for gentle removal of the wound care dressing[12]. The TIELLE Silicone Border can be used to manage a range of exudate levels in a range of wound types (Box 1). The soft silicone adhesive spans the full extent of the dressing, allowing for gentle removal, and minimising pain and trauma for the patient[12]. *In vitro* data show the TIELLE Silicone Border dressing range retains more than 80% of fluid under the pressures associated with compression. The retention of the fluid may, in turn, help reduce the risk of skin maceration[13]. TIELLE Silicone Border can be worn for up to 7 days depending on wound condition and exudate level[12] and, according to the manufacturer, is designed to help reduce the number of dressing changes — a benefit for patients, payers and providers.

TIELLE Non Adhesive is a hydropolymer dressing composed of three layers. The hydropolymer wound contact layer locks fluid away to reduce the risk of maceration and leakage[14,15], a superabsorbent layer enhances fluid-handling capacity[16] and a new, highly breathable polyurethane film backing helps prevents bacterial ingress[17]. TIELLE Non Adhesive is designed to absorb exudate, help maintain a moist wound-healing environment and minimise the risk of

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maceration through the combination of absorbency and moisture-vapour transmission. *In vitro* evidence shows that TIELLE Non Adhesive absorbs and retains fluid under compression[18]. The dressing can be easily adapted, cut to shape and secured using the most appropriate method for the patient (e.g. under compression) in a variety of wounds (Box 2). TIELLE Non Adhesive can absorb fluid for up to 7 days without leakage, and is designed to be cost-effective by helping to reduce the number of dressing changes.

CASE REPORTS: TIELLE DRESSINGS IN PRACTICE

The full case series spanned 13 patients under the care of six clinicians in four countries: the UK, the Netherlands, Germany and Australia. One patient withdrew for reasons unrelated to the study, and is therefore not included in the statistical analysis. Another patient who completed reviews remotely did not provide data for statistical analysis; however, the management of these superficial leg wounds is presented within the booklet as a demonstration of the possibilities for patient self-care with TIELLE.

Six further case reports have been selected for full presentation on the pages that follow: a venous ulcer, two surgical wounds, a sacral pressure ulcer, a skin tear and a drug-induced hydroxyurea leg ulcer. Five cases that were completed — a pressure ulcer, two non-healing surgical wounds and two leg ulcers — are not included in this booklet, but have been included in the statistical analysis.

In all cases, the patients presented with numerous factors that complicate wound healing. Even in patients with 'simple' wounds — such as the skin tear and the superficial leg wounds — the patients' conditions did not promise a road to smooth, straightforward healing, making appropriate dressing selection critical for avoiding stalled healing. Patient quality of life was another key driver for dressing selection, due to the complexity of patients' conditions, presence of fragile skin and some acute experiences of pain.

Clinicians and patients were able to rate several aspects of dressing performance as excellent, very good, good, fair and poor. Over 40 dressing changes and regimen reviews for both TIELLE dressing types, the following results were gleaned:

- The conformability of the dressing to the wound — 47.5% excellent, 40% very good, 10% good
- The ability of the dressing to stay in place during wear (only TIELLE silicone border) — 12.5% excellent, 60% very good
- Patient comfort during wear time — 30% excellent, 55% very good.

The dressing's performance and ability to stay in place during showering was rated over 32 dressing changes/reviews, as not all patients showered with the dressing in place. However, for this metric, the ratings were 31.25% excellent, 40.63% very good and 15.63% good.

The ability of TIELLE to handle exudate was rated according to the same descriptors for 39 dressing reviews (there was not always exudate on the dressing), and again fared well, with zero ratings of poor and one of fair, and the rest being highly positive: 33.3% excellent, 46.15% very good and 17.95% good.

Overall satisfaction with treatment levels were high. There were zero reports that either patient or clinician was 'dissatisfied' at any of the dressing changes, and only one rating of 'neutral' for each clinician and patient. The 39 clinician satisfaction and 39 patient satisfaction ratings were the same, with 17 'highly satisfied' and 21 'satisfied' in both cases. In general, clinicians reported that TIELLE was easy to use, and patients experienced reduced wound-related pain levels over the course of treatment.

As one clinician summarised for TIELLE Non Adhesive: "The wound is much improved, with obvious healing, and the patient's pain has reduced significantly. I am very impressed with the performance of the dressing, how it has allowed the surrounding skin to progress, and the patient comfort."

CASE 1: IMPROVING PATIENT QUALITY OF LIFE IN A WOUND OF 3 YEARS' DURATION WITH MULTIPLE COMORBIDITIES

Author: Astrid Probst, Nurse Wound Management, Kreiskliniken Reutlingen GmbH, Reutlingen, Germany

INTRODUCTION

Mr WB is a 78-year-old male who presented to the outpatient wound clinic with a venous ulcer that had been present on the left foot, just below the medial malleolus, for over 3 years. The wound had failed to heal due to numerous co-morbidities, including hypertension, hyperlipidaemia, cardiovascular disease, acute and chronic renal failure (related to cardiovascular disease), and oedema in the leg. The patient had a history of rectal and prostate cancers, and was currently having investigations for lung disease. The patient was taking valproic acid.

At presentation, the wound measured 0.6cm (length) x 0.8cm (depth) x 1.0cm (width). The wound bed composition was 70% granulating, 20% sloughy and 10% epithelialising. The wound had most recently been treated with a primary silver antimicrobial dressing and a secondary absorbent foam dressing, with dressing changes 2–3 times a week due to levels of serous exudate that could not be adequately managed by the dressing under compression bandaging. The patient's leg had previously also been put in a cast to treat the wound, and the patient had been hospitalised for major interventions such as epidermal harvesting and negative pressure wound therapy. The wound was currently not painful, but the patient expressed concern about other quality-of-life issues, including being able to shower with the dressing in place, and being able to use compression hosiery.

TIELLE Silicone Border was chosen to ensure comfort and exudate control, even under the pressures exerted by compression, as well as addressing wellbeing issues. Mechanical and sharp debridment were performed to prepare the wound bed, and TIELLE Silicone Border was used in conjunction with a silver and charcoal antimicrobial dressing (as per local policy as there were concerns of pending infection) used to reduce exudate levels. Compression hosiery of 30mmHg was initiated. Dressing change was scheduled for 3 days later, with review scheduled for 1 week later.

Review 1: The wound measured 0.5cm x 0.8cm x 1.0cm, a 17% reduction in wound volume, with wound bed composition of 80% granulating, 10% slough and 10% epithelialising. The wound condition overall appeared to have improved (Figure 1). Exudate levels were low, and the wound itself remained not painful. The patient's wife had been able to change the dressing once between reviews, and the patient reported satisfaction with being able to shower and wear compression hosiery. The dressing was rated 'good' for its ability to conform, its ability to stay in place (even during showering), and patient comfort during wear. Due to the improvements in the wound and the overall level of satisfaction with the regimen, it was continued unchanged — including debridement and the use of compression hosiery — for another week.

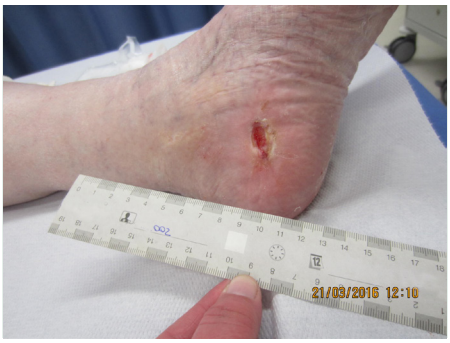

Figure 1. Wound at first review

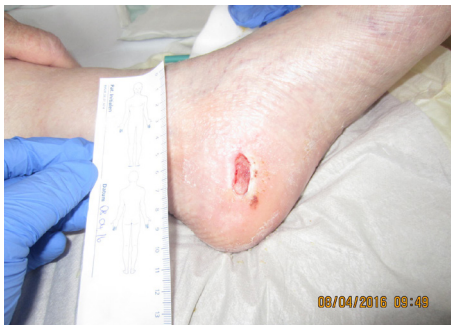

Figure 2. Wound at fourth review

Review 2: The wound had again reduced in size and, although wound bed composition was unchanged, granulation tissue continued to appear healthy. Exudate levels were low, and there was no wound-related pain. The patient and clinician remained satisfied with dressing performance and comfort, and the ways in which the dressing addressed the patient's quality-of-life concerns. The patient's wife continued to change the dressing once between reviews. At this visit, the decision was made to discontinue the silver antimicrobial dressing, because the wound was progressing. TIELLE Silicone Border was used in conjunction with compression hosiery, and review was scheduled for 1 week later.

Review 3: Between reviews, the patient was hospitalised due to comorbid conditions. This admission restricted his mobility which, in turn, led to some deterioration of the wound bed. The wound measured 0.6cm x 0.8cm, with an increase in length to 1.7cm; however, wound bed composition was still 80% granulating, 10% sloughy, 10% epithelialising. Periwound skin had become macerated. Despite the complications, the patient and clinician rated satisfaction as good on the dressing's ability to conform to the wound and to stay in place during wear time, and on dressing performance and ability to stay in place during showering, as well as dressing comfort. The decision was made to continue with TIELLE Silicone Border and compression hosiery for another week, with dressing changes performed at home as needed.

Review 4: The dressing was changed once in 7 days, and the wound condition improved over this time. The wound now measured 0.8cm (length) x 2.0cm (wide), due to debridement of devitalised tissue that had arisen from the episode of maceration; depth had resolved, representing a 96% overall reduction in wound volume (Figure 2). Wound bed composition was 80% granulating, 10% sloughy and 10% epithelialising. Exudate levels were low, and the condition of the periwound skin appeared healthier. Due to satisfaction with the dressing regimen and the improvements in quality of life experienced by the patient, the decision was made to continue with the TIELLE Silicone Border regiment beyond the case study period.

CONCLUSIONS

Despite complications due to comorbidities, the condition and depth of the wound improved overall. Maceration had been an ongoing issue for the periwound skin over the prior 3 years' treatment, and the episode between reviews 3 and 4 was less deleterious than previous episodes. Dressing changes were not painful, and the dressing performance was rated good on all parameters measured throughout the 4-week evaluation.

The patient reported liking TIELLE Silicone Border compared to previous regimens because it allowed him to use compression hosiery, wear normal clothes, maintain mobility and use the shower. He and his wife also expressed satisfaction with the ease of dressing changes at home.

In a chronic wound in a very sick patient, such as reported in the above case study, the objective is not always healing. Wellbeing issues were important to the patient, and TIELLE Silicone Border represented an improvement in quality of life in a long-standing, hard-to-heal ulcer in a patient with multiple comorbidities. In addition, despite numerous complicating factors, the wound did improve, which may give it a chance to heal in the future.

CASE 2: STALLED, PAINFUL LOWER-EXTREMITY PRESSURE ULCER IN A PATIENT WITH VASCULAR INSUFFICIENCY

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Expertise Centrum Wondzorg, The Netherlands

INTRODUCTION

Ms DB is an 88-year-old female who presented to the outpatient wound clinic with a pressure ulcer (PU) of unknown aetiology that had been present for 6 weeks on the left lateral malleolus. Wound healing had become stalled in part due to venous insufficiency; the patient also had osteoporosis and Alzheimer's disease, which limited her mobility and may have had a role in the development of the PU. The patient was taking alendronate, artelac EDO and galantamine.

At presentation, the wound measured 0.8cm (length) x 0.4cm (width), with a wound bed of 100% slough. The wound had most recently been treated with an antimicrobial dressing changed daily. Exudate levels were low but purulent, and wound bed was dry, sloughy and forming a crust. Periwound skin was inflamed. The patient did not have peripheral neuropathy, and reported wound-related pain as 6 out of 10 on the visual analogue scale (VAS).

TIELLE Silicone Border was chosen to promote comfort and the autolytic debridement process. The wound bed was cleansed with saline, and TIELLE Silicone Border was used in conjunction with an elastic bandage for oedema control. Pressure relief was initiated to prevent further breakdown of the PU. Dressing change and review was scheduled for 1 week later.

Review 1: The wound measured 0.8cm x 1.0cm, due to the autolytic debridement and clearing of the crust. The wound bed was still sloughy, but it was a wet slough, and inflammation of the periwound skin had resolved. Exudate levels remained low, and had become serosanguinous in type. The patient reported wound-related pain as 5 out of 10 on the VAS. Easy application of TIELLE Silicone Border meant the patient reported no dressing-related pain at change. The patient noted that comfort with the dressing during wear time was 'very good' and the dressing's ability to stay in place during showering was 'good'. Because of the improvement in the wound bed condition and the periwound skin, the decision was made to continue with TIELLE Silicone Border. After cleansing with saline, the dressing was applied, along with an elastic bandage, with pressure relief prescribed during the night. The next dressing change was scheduled for 1 week.

Review 2: The wound had reduced in size from the first review — to 0.6cm x 0.5cm; a 6.25% reduction in wound surface area from baseline. The wound bed now exhibited 50% slough, 50% granulation tissue, and serosanguinous exudate volume was low. Periwound skin was affected by a flare of eczema. Although wound-related pain remained a 5 out of 10, the patient reported high satisfaction with dressing comfort during wear time and dressing change. Because of the improvements

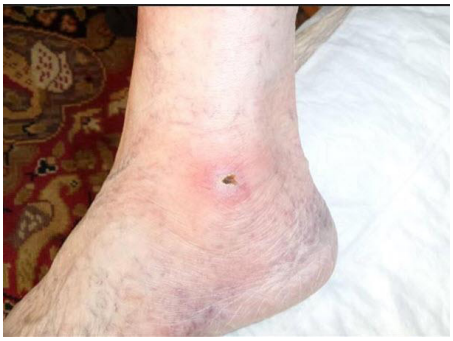

Figure 1: Baseline — necrotic crust covered most of the wound bed and periwound skin slightly inflamed

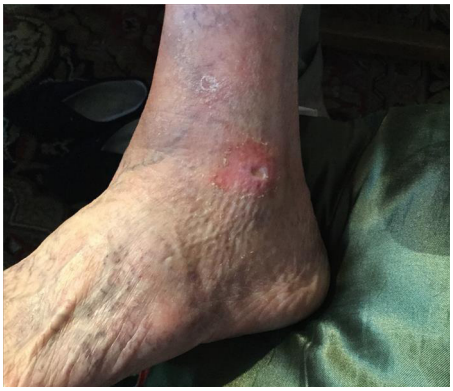

Figure 2: Second review — necrotic crust has resolved through autolysis and the wound is beginning to epithelialise

seen and the positive comments about comfort, the dressing regimen was continued unchanged.

Review 3: The wound continued with marked reduction — to 0.6cm x 0.4cm (a 25% reduction in wound surface area from baseline) — and the wound bed now exhibited 100% granulation tissue. Serosanguinous exudate was low in volume. Periwound skin exhibited some irritation but was not considered inflamed. The patient continued to report wound-related pain as 5 out of 10 on the VAS. However, overall comfort with the dressing was 'very good', and because of this and the steady improvements in the wound, the decision was made to continue the dressing regimen unchanged.

Review 4: The wound was now nearly closed, and granulation tissue continued to make up 100% of the wound bed. Exudate was low-volume and could be described as serosanguinous. The eczema-related irritation of the periwound skin had improved, as had wound-related pain, which the patient now rated as 3 out of 10 on the VAS. Patient satisfaction and comfort with the dressing remained high. Due to the overall improvement in both the wound and comfort with the dressing regimen, the decision was made to continue with the TIELLE Silicone Border regimen beyond the case study period.

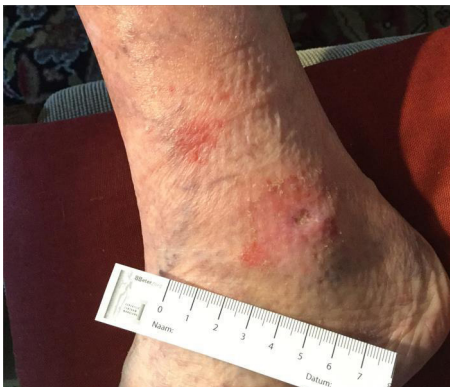

Figure 3: Last review, healing progress good and wound almost closed

CONCLUSIONS

TIELLE Silicone Border was judged to promote the autolytic debridement process, as seen in the removal of crust and subsequent decrease of slough. The increase in granulation tissue and overall progression of wound-healing during the 4-week period were encouraging, particularly in lower-extremity PU that could have been complicated by vascular insufficiency and impaired mobility. Patient comfort was important, particularly as the wound had been causing the patient pain during the previous dressing regimen; pain levels decreased from 6 to 3 out of 10 on the VAS over the course of management with TIELLE Silicone Border.

CASE 3: PATIENT ABLE TO CARRY OUT CARE FOR TWO WOUNDS WHILE TRAVELLING IN AUSTRALIA

Author: Suzanne Kapp, Clinical Nurse Consultant, Austin Health Wound Clinic and The University of Melbourne

INTRODUCTION

Ms SJ, a 59-year-old female who presented to the outpatient wound clinic in Melbourne, Australia, with two leg ulcers in the left gaiter region. The wounds had been present for 8 weeks, and had been previously treated by her partner with a non-stick pad, gauze and micropore tape, with dressing changes twice daily. Development of the ulcers was attributed to fragile skin and peripheral oedema related to treatment for cancer; the patient had a history of skin tears over recent times which usually healed without concern. She was taking dexamethasone, clexane and pantoprazole.

The first wound measured 2.4cm (length) x 2.0cm (width), and the second 1.8cm x 1.5cm. Both wound beds were about 50% granulation and 50% slough, with heavy serous exudate and dry periwound skin. The patient did not report any wound-related pain.

The wound was cleansed with sterile water. Due to high exudate levels and the clinical judgement that the wounds were at risk of becoming critically colonised (due to the patient's health status), a cadexomer iodine-containing absorbent dressing was used along with TIELLE™ Silicone Border, for additional exudate control and gentle care for the fragile periwound skin.

An elastic bandage was used to secure the two dressings, and the patient and partner were provided with education about how to remove and apply dressings. The patient was soon to travel on holiday; therefore her partner was to continue with conducting the wound dressing changes every three days.

Reviews: The patient was unable to attend clinic due to extensive travel during the 4-week study period and required a dressing regime that provided confidence and allowed self-management. The patient did provide images of the wounds that were able to be measured:

+6 days
- Wound 1: 2.1cm x 0.9cm (a 60.6% reduction in wound surface area from baseline); 90% slough, 10%granulation
- Wound 2: 1.8cm x 1.3cm (13.3% reduction in wound surface area from baseline); 90% slough, 10% granulation

+11 days
- Wound 1: 1.7cm x 0.9cm (a 68.1% reduction in wound surface area from baseline); 80% slough, 20% granulation
- Wound 2: 1.1cm x 0.9cm (a 63.3% reduction in wound surface area from baseline); 60% slough, 40% granulation

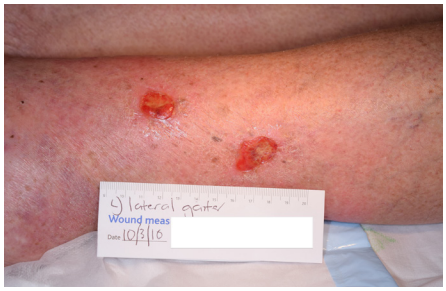

Figure 1. Wounds at presentation

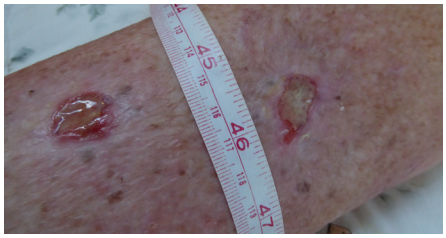

Figure 2. Wounds 6 days after presentation

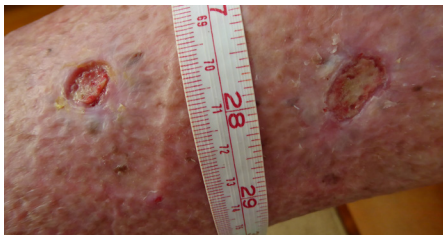

Figure 3. Wounds 11 days after presentation

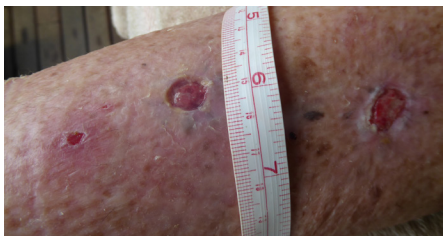

Figure 4. Wounds 19 days after presentation

+19 days

Around the two-week point, the patient had spent several days travelling by car, which her partner believed to have caused Wound 2 to increase slightly in size. However, after a further 5 days' treatment using the dressing regimen, the wounds had begun progress again.

- Wound 1: 1.5cm x 0.9cm (a 71.9% reduction in wound surface area from baseline); 70% granulation, 30% slough
- Wound 2: 1.4cm x 1.1cm (a 43% reduction in wound surface area from baseline); 90% granulation, 10% slough

CONCLUSIONS

The use of TIELLE Silicone Border prevented skin tears and allowed the wound beds to improve and the size to decrease. Although the time spent in the car (with legs dependent) set one wound back in terms of size, by the end of the case study period, the surrounding skin was no longer dry and the wounds were progressing towards healing. The patient's partner was able to provide the necessary care with TIELLE Silicone Border, helping to promote wound-healing while the patient was better able to carry on with normal activities as much as possible.

CASE 4: DEHISCED SURGICAL WOUND OVER DIFFICULT ANATOMY NON-HEALING FOR 2 MONTHS

Author: Tanya Brandon, Plastics Specialist Nurse, St John's Hospital, Howden, Livingston, UK

INTRODUCTION

Ms NW is a 43-year-old female who presented to the outpatient wound clinic with a dehisced post-surgical haematoma on the dorsum of the left foot. The patient had no relevant medical history and was on no medications. However, the wound had been present for 2 months, despite regular debridement and a dressing regimen comprising a cadexomer iodine-containing absorbent dressing (primary) and an integrated-channel absorbent foam dressing.

At presentation, the wound measured 7cm (length) x 3cm (width), with a wound bed that was 90% granulation tissue and 10% slough. Exudate was serous and moderate, while surrounding skin was inflamed, dry and flaky. Wound-related pain was rated as a 3 out of 10 on the VAS. The wound was cleansed with water and a skin-rehydrating wash, and then a barrier cream was applied. The cadexomer iodine-containing absorbent dressing was applied as the primary dressing to encourage further granulation and remove remaining slough, and TIELLE Non Adhesive was chosen as the secondary dressing for its absorbency and fluid-handling capabilities, to reduce the risk of maceration to the fragile periwound skin. The dressing was secured with a non-woven synthethic adhesive tape. Dressing change and review were scheduled for 3 days later.

Review 1: The wound size remained unchanged; however, there was now 5% epithelialising tissue, 90% granulation and 5% slough. Wound-related pain had decreased to 2 out of 10 on the VAS. Both wound bed tissue and periwound skin appeared healthy. Serous exudate levels were moderate, and TIELLE Non Adhesive was managing it well. The patient reported the dressing to be very comfortable and, due to satisfactory progress in such a short time, the decision was made to discontinue the antimicrobial dressing and just use TIELLE Non Adhesive. Wound bed preparation involved some debridement and subsequent application of a barrier cream to the surrounding skin. Dressing change and review were scheduled for 3 days later.

Review 2: Wound size, wound bed composition, and exudate level and type remained the same. Pain was still a 2 out of 10 on the VAS, and patient and clinician both rated TIELLE Non Adhesive as 'excellent' on every performance metric, including ability of the dressing to conform to the wound, patient comfort during wear time and ability of the dressing to handle exudate. No debridement was needed during wound bed preparation, which required only the application of barrier cream to the periwound skin. Due to the comfort and the feeling that the wound was progressing, the dressing regimen was continued unchanged.

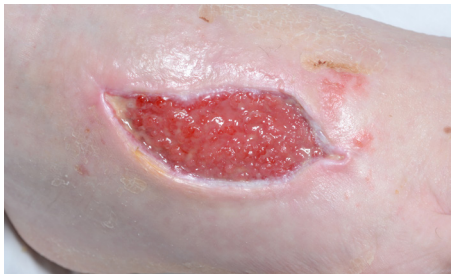

Figure 1: Wound at initial presentation

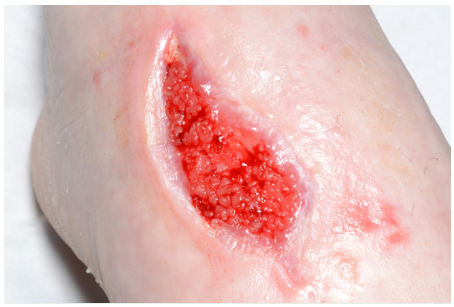

Figure 2: Wound at second review

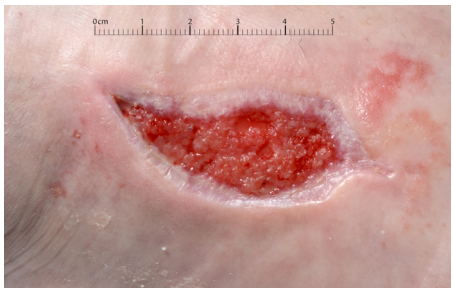

Figure 3: Wound at final review

Review 3: The wound had significantly reduced in size — to 5.5cm x 2.5cm, a 35% reduction in wound surface area from baseline. Slough made up just 2% of the wound bed, with the other 90% being granulation tissue, and 8% epithelialisation. Serous exudate remained moderate, and periwound skin was healthy, as TIELLE Non Adhesive continued to manage exudate well. The patient now rated pain as 1 out of 10 on the VAS. As patient and clinician were both 'very satisfied' with the treatment. The wound bed preparation and dressing regimens were continued unchanged.

Review 4: The wound had further reduced in size, to 5cm x 2cm — a 52% decrease in wound surface area from baseline. Wound bed composition was 8% epithelialising, 91% granulating and 1% slough. Exudate levels were low and periwound skin was healthy. The patient reported no pain and that the dressing was contributing to comfort levels. Due to overall satisfaction and the progress being seen in such a short time (less than 2 weeks), the dressing regimen was continued beyond the case study period.

CONCLUSIONS

TIELLE Non Adhesive provided a comfortable, easy-to-remove dressing choice for managing exudate in a wound on a difficult anatomical area. It was judged to contribute positively to the progress of the periwound skin. The wound was on its way to healing and, a couple days after the end of the case study period, measured 4.7cm x 1.7cm (a 62% reduction in wound surface area from baseline). From a clinical standpoint, the wound progress made with TIELLE Non Adhesive was impressive, and the patient was very happy with the comfort levels throughout treatment.

CASE 5: HEALING OF SKIN TEAR IN 1 WEEK IN A PATIENT WITH MULTIPLE COMORBIDITIES

Author: Rosie Callaghan, Tissue Viability Specialist Nurse in Nursing Homes, Worcestershire PCT, UK

Jackie Stephen-Haynes, Professor in Tissue Viability, Wound Healing Unit, Birmingham City University; and Consultant Nurse, Worcestershire Health and Care Trust, UK

INTRODUCTION

Ms RM is a 76-year-old female who sustained a skin tear on the upper shin of the right leg while putting on compression stockings and getting her leg caught in them. The patient has a history of venous leg ulceration and has chronic oedema/lymphoedema, kidney disease and diabetes, which is drug controlled. She is also on amitriptyline for restless legs.

The 2cm x 1cm wound had been present for only 12 hours, but the wound bed was already composed of 100% slough and, due to the patient's multiple comorbidities and fragile skin resulting from oedema, the decision was made to use a more advanced dressing. Periwound skin was dry and flaky, and exudate levels were low. The patient reported no pain associated with the wound. Because the skin flap had become encrusted, it was rehydrated with saline soaked gauze. TIELLE Silicone Border was applied because of its ease of use and its ability to be gentle on the periwound skin. Dressing change and review was scheduled for 1 week later.

Review 1: The dressing had sloughed off the scaled skin flap and the wound had healed completely. Although the periwound skin was dry and flaky, there was no skin stripping upon removal of the dressing. In addition, the periwound skin was entirely undamaged by having the dressing in place, and the area where the wound margins had grown together appeared healthy. The dressing regimen was discontinued due to healing.

CONCLUSIONS

This was a wound where infection was a distinct possibility if the wound did not heal quickly. With 1 week's treatment, the wound had healed completely, and TIELLE Silicone Border was easily removed without causing any damage to the fragile periwound skin. The soft dressing contoured well to the body and the patient liked the soft feel of the dressing. TIELLE Silicone Border was judged to have managed exudate well. Going forward, the patient would be implementing a skin care regimen and would be using the correct hosiery-donning aid, in order to help prevent future skin tears.

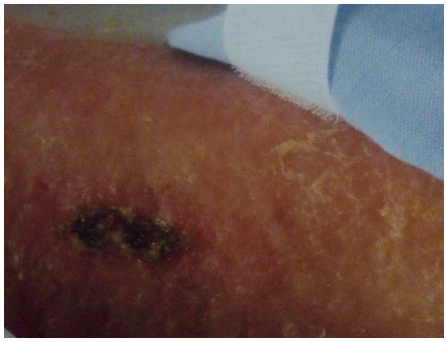

Figure 1. Wound at presentation

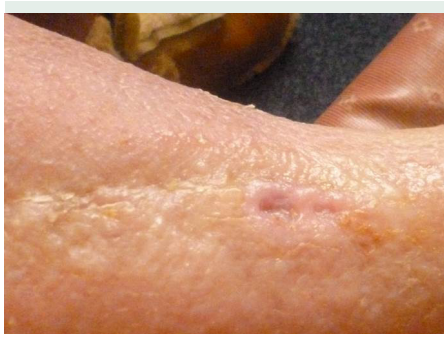

Figure 2. Wound fully healed after 1 week

CASE 6: ONE-THIRD DEPTH IMPROVEMENT OF PRESSURE INJURY IN PATIENT WITH FRAGILE PERIWOUND SKIN

Author: Rosie Callaghan, Tissue Viability Specialist Nurse in Nursing Homes, Worcestershire PCT, UK

Jackie Stephen-Haynes, Professor in Tissue Viability, Wound Healing Unit, Birmingham City University; and Consultant Nurse, Worcestershire Health and Care Trust, UK

INTRODUCTION

Ms DD is a 74-year-old female in a nursing home who has diabetes and mobility issues, and was bedbound for a short period due to ill health. She had a deep pressure ulcer (PU) of 4 weeks' duration on the sacral area that had been treated with a gentle foam dressing, with dressing changes every 2 days due to heavy exudate levels.

At presentation to the specialist wound care team, the PU measured 5cm (length) x 6cm (depth) x 4cm (width), and the wound bed was 40% granulation and 60% sloughy tissue. Periwound skin was discoloured and extremely fragile. Heavy exudate was serosanguinous, and wound-related pain was rated 6 out of 10 on the VAS.

The decision was made to use TIELLE Silicone Border to protect the periwound skin and absorb exudate. A honey dressing was applied as the primary dressing, to encourage debridement and TIELLE Silicone Border was used as the secondary dressing. In addition, offloading with an air mattress and a repositioning regimen were instituted. Dressing changes were scheduled every 3 days, with review in 1 week.

Review 1: The wound now measured 6cm x 5cm x 4cm, with some increase of the wound volume due to debridement of nonviable tissue; however, depth had improved by 1cm. The wound bed was made of 60% granulation and 40% of sloughy tissue. The dressing was easy to remove and did a good job protecting the delicate periwound skin. Although serosanguinous exudate was still heavy in volume, the dressing helped prevent leakage. Pain was reported as 3 out of 10 on the VAS. Due to the general improvements in the wound and the ability of the dressing to prevent further breakdown of the periwound skin while being comfortable for the patient, the dressing regimen was continued unchanged.

Review 2: The wound size remained unchanged, due to mechanical debridement of the wound bed. But the wound bed composition had continued to improve — it was now 90% granulating, with the remainder sloughy tissue. Serosanguinous exudate was now moderate in volume, and the periwound skin looked much healthier in terms of colour, although it remained generally fragile.

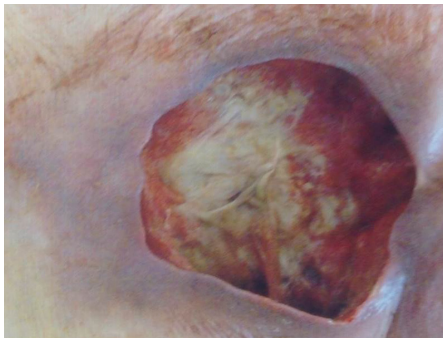

Figure 1. Wound at presentation

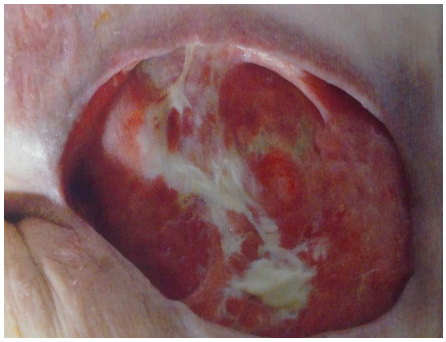

Figure 2. Wound at second review

Importantly, the patient had no pain. The honey dressing was discontinued, and the wound was instead packed with a hydrofiber dressing, with TIELLE Silicone Border applied as the secondary dressing. Changes were scheduled for every 3 days, with review 1 week later.

Review 3: The wound size had decreased slightly — to 6cm x 4cm x 4cm, a 20% reduction in wound volume. In addition, the wound bed had continued to improve and now exhibited 95% granulating tissue, with just 5% slough. Exudate levels were moderate and periwound skin appeared healthy. Due to satisfactory progress and the patient's continued experience of no pain, the dressing regimen was continued unchanged.

Review 4: The wound size had not changed, but the wound bed was now 100% granulation tissue, indicating that the wound size would begin to decrease in future. Depth had already improved by 2cm. The periwound skin was healthy, and the dressing did not leave any silicone after removal. The patient continued to report no pain, and rated the dressing as 'very good' for comfort during wear time. Because the next step was to begin progress towards closure, and the general fragility of periwound skin required protection, the decision was made to continue with the dressing regimen beyond the study period.

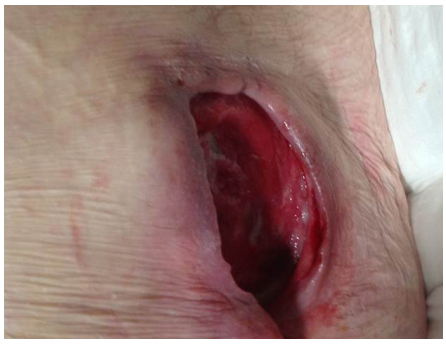

Figure 3. Wound at fourth review

CONCLUSIONS

TIELLE Silicone Border helped to provide an environment in which autolytic debridement and some depth resolution could occur. It was gentle on the periwound skin while controlling exudate levels well. After 2 weeks, the patient was no longer experiencing pain, which was a big boost in terms of quality of life.

It is important to note that, with a wound of this type and depth, negative pressure wound therapy (NPWT) would be appropriate; however, the condition of the periwound skin contraindicated its use at that time. As the periwound skin improved, the plan was to move the patient to NPWT, which would not have been possible without treatment with TIELLE Silicone Border.

CASE 7: COMPLEX LEG ULCERATION INDUCED BY HYDROXYUREA AND COMPOUNDED BY CHRONIC VENOUS INSUFFICIENCY

Author: Wendy White, Director, APN, Educator, Advanced WoundCare, New South Wales, Australia

INTRODUCTION

Mr JV is an 83-year-old male who presented to a primary practice wound service with a spontaneous, undiagnosed lower-limb wound of 5 months' duration. He had a history of prostate cancer and prostatectomy, fibromyalgia, hypertension, asbestosis, thrombocytopenia and polycythemia. He had confirmed venous incompetence with no arterial insufficiency. His medications included aspirin, pregabalin, tramadol and hydroxyurea. On entry to the service, a provisional/working diagnosis of hydroxyurea-induced leg ulceration with associated chronic venous insufficiency was made.

The 1.4cm (length) x 1.9cm (width) wound was located on the right lateral malleolus, and had previously been treated with an antimicrobial foam dressing with an adhesive border. In the month before presentation for the case study, a tubular bandage had been used to support venous function; on entry to the service, he had tolerated a single layer of tubular support only, due to pain in and around the wound.

The wound bed was covered (100%) by thick, fibrinous, firmly attached slough, with no viable tissue observed. The general periwound area was inflamed, dry and flaky. Exudate levels were low, and exudate type was serous. The patient rated wound-related pain as 9 out of 10 on a numerical rating scale.

TIELLE Non Adhesive was chosen due to the painful nature of the wound, as the patient had described painful, skin-irritation relating to adhesive dressings used previously. In addition, the periwound skin was fragile, and providing protection and preventing further trauma was a priority. The wound bed was prepared via conservative sharp wound debridement (CSWD) with curettage performed post application of local anaesthetic cream.

After debridement a surfactant antiseptic solution was used, the limb was washed and general skin care undertaken including moisturiser (not in the area that would be underneath the dressing). TIELLE Non Adhesive was applied, along with increasing the tubular support to two layers (graduated), to gauge suitability for future application of a reduced graduated-compression bandaging system.

The daily hydroxyurea dosage was reduced by 50% after consultation with the medical team, and Mr JV was asked to undergo weekly full blood counts and continue regular follow up with his haematologist and general practitioner to monitor the impact of the medication reduction. Dressing change and review were scheduled for 1 week later.

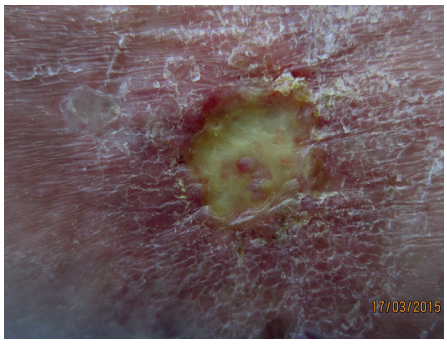

Figure 1: Wound on presentation

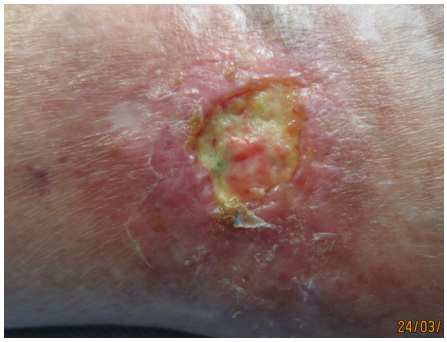

Figure 2: Wound at first review

Review 1: Due to a reduction in nonviable tissue through CSWD and autolytic debridement, wound size increased to 1.7cm x 1.9cm x 0.1cm. The wound bed was composed of 80% slough and 20% granulation tissue, with a noted reduction in periwound inflammation and dryness. Importantly, wound-related pain severity was now rated as a 3 out of 10 (with worst pain during the week was 5 out of 10). Mr JV reported less background and incident pain, and stated that he generally felt much better. The dressing conformed 'very well' to the wound and stayed in place, and was comfortable for the patient to wear. TIELLE Non Adhesive was easy to remove and preserved the periwound skin, while maintaining an optimal moisture balance of the wound bed and surrounding skin. Wound bed preparation at this review excluded CSWD. A surfactant antiseptic cleaner was used as a 10-minute soak, the limb was washed with pH-balanced disposable wash cloths, and skin care (moisturiser) was applied. A collagen wound product was introduced as the primary dressing, with TIELLE Non Adhesive as the secondary dressing. A graduated reduced-compression bandage system was applied. Mr JV was recommended to commence oral zinc and vitamin C supplements. Of note was an increase in platelet count due to the reduction in hydroxyurea dose 1 week ago. Dressing change and review were again scheduled for 1 week later.

Review 2: The wound size had reduced to 1.4cm x 1.5cm. The wound bed remained covered with slough, which appeared thinner, with some evidence of underlying vascular activity. Exudate levels were still low. Periwound skin inflammation and dryness had again reduced, and TIELLE Non Adhesive was easily removed, causing no periwound skin damage at dressing change. The patient reported for the first time in months that he had experienced no wound-related pain, a dramatic improvement from 9 out of 10 at baseline. Because of the progress in the wound, in particular in patient comfort, the wound bed preparation and dressing regimens were continued unchanged.

Review 3: The wound dimensions had again reduced, to 1.2cm x 1.5cm. Wound bed composition could not be determined because the decision was made to leave the collagen dressing *in situ*. Wound discharge had fully resolved, with no exudate noted on the TIELLE Non Adhesive. The periwound skin condition and appearance continued to improve. Because of the progress in the wound, and Mr JV's improved comfort levels, the wound bed preparation and dressing regimens were continued unchanged. The collagen dressing was reinforced, and TIELLE Non Adhesive and compression applied. Dressing change and review were scheduled for 1 week later.

Review 4: The wound had further reduced in size, to 0.8cm x 1.5cm; a 50% reduction in surface area compared to baseline. Wound bed composition could not be determined because the decision was made to leave the collagen dressing in place. There was no exudate on the TIELLE Non Adhesive. The periwound skin was now healthy except for some mild dryness; the patient reported no wound-related

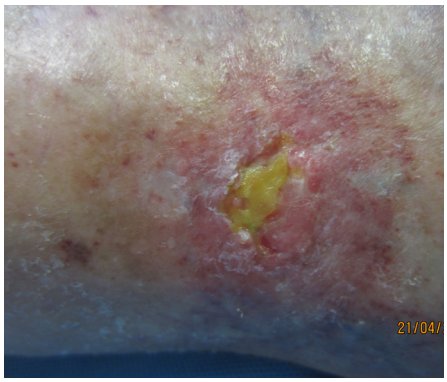

Figure 3: Wound at final review shows good progress, note collagen left in situ

pain. Because of the progress made and the high degree of patient satisfaction with regard to comfort, the dressing regimen was continued beyond the case study period.

CONCLUSIONS

TIELLE Non Adhesive provided a comfortable, easy-to-remove dressing choice for a patient experiencing high levels of wound-related pain and exhibiting poor periwound skin condition. After 5 months with an undiagnosed, stalled leg ulcer, progress had restarted, and the wound was moving steadily towards closure. Identification and treatment of the underlying cause and contributing systemic, regional and local factors using a multimodal approach to this complex painful wound was essential, along with addressing past negative experiences with adhesive dressings.

Most importantly, the patient was very pleased with how the dressing had met his quality-of-life needs and wished to continue using TIELLE Non Adhesive after the study period. In an individual with complicating comorbidities, it is not always easy to accommodate quality-of-life issues; however, TIELLE Non Adhesive provided the moisture balance and skin protection required, along with the comfort level the patient desired.

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