

Case study series: managing skin integrity — octenicare[®] repair creme

KEY WORDS

- ▶ Eczema
- ▶ Emollients
- ▶ Moisture-associated skin damage
- ▶ Skin integrity
- ▶ Repair creme

Skin damage resulting from intrinsic and extrinsic factors has a negative impact on our physical and psychosocial health. Patients at risk of skin breakdown or presenting with damage require a detailed assessment to establish a suitable skin regimen. In many cases, a skin-friendly cleanser, washing with warm water, and the daily application of an emollient is appropriate. This case series evaluates the clinical performance and outcomes of twice-daily octenicare repair creme application on a range of skin conditions. It also reports on the acceptability of octenicare to the clinician and patients.

Healthy skin is strong, supple and resilient, with a great capacity to repair itself. The skin consists of the epidermis, dermis and deeper hypodermis that together perform a number of functions, such as preventing damage from trauma, preventing infection, regulating body temperature and producing vitamin D and melanin (Wounds UK, 2018). When compromised, there is an increased risk of skin tears, infections and pressure ulcers, which are associated with negative impacts on physical health, mobility and quality of life (Moncrieff et al, 2015; LeBlanc et al, 2018). Further health complications and high healthcare costs are also associated with skin damage (Moncrieff et al, 2013).

A number of groups are susceptible to skin damage resulting from intrinsic and extrinsic factors (*Table 1*). Common skin conditions including rashes, eczema, ichthyosis (dry, thick, scaly skin), psoriasis, pruritus, hyperkeratosis, moisture-associated skin damage and incontinence-associated dermatitis adversely affect skin integrity. The number of people with atopic skin conditions has increased over the past 50 years (Moncrieff et al, 2015), and an increasing number of older people are being diagnosed with eczema and clinically significant ichthyosis (Nutten, 2015). Older people's skin is also vulnerable to environmental damage or pressure injury, as it is thinner, drier and less elastic than younger people's skin (Wounds UK, 2012).

Skin protectants: Barrier creams

Patients at risk of or presenting with skin breakdown, and all older people (Wounds UK, 2012) should have a detailed skin assessment to establish an individualised management protocol (Wounds UK, 2018). The assessment should be documented and include (Moncrieff et al, 2015; Wounds UK, 2018):

- ▶ Medical history, particularly allergy, sensitivities or skin infection
- ▶ Identification of intrinsic and/or extrinsic risk factors
- ▶ Current skin condition (e.g. dry, rash, sore, itchy) and pressure ulcer risk (e.g. Waterlow Risk Assessment Score)
- ▶ Patient's knowledge of his/her skin condition and current skincare regimen
- ▶ History of the condition
- ▶ Skin texture and temperature
- ▶ Psychosocial impact.

Good skin management is holistic and should include optimising the patient's general health, nutritional status, improving skin hygiene, managing incontinence or excess body moisture, and supporting mobility (*Table 2*). While intrinsic risk factors for deteriorating skin integrity are hard to prevent, extrinsic factors can be minimised (*Box 1*). An individualised management protocol using a skin-friendly cleanser (not traditional soap, which dries the skin) and warm water with daily emollient can be

Table 1. Patient groups with compromised skin (adapted from Wounds UK, 2018)

Component	Risk factors
Older adults	<ul style="list-style-type: none"> » Skin tears » Pressure damage » Infection » Cellulitis » Inflammation » Dryness/flaking » Possible related issues with nutrition » Patients with dementia
Patients with skin conditions (e.g. eczema, scars)	<ul style="list-style-type: none"> » Dryness/flaking » Pruritis » Inflammation » Infection » Possibly skin tears relating to scratching, sheer and friction
Spinal cord injury/paralysis	<ul style="list-style-type: none"> » Skin tears » Pressure damage » Infection » Inflammation
Critically ill and injured children	<ul style="list-style-type: none"> » Nappy dermatitis » Skin tears » Pressure damage
Patients with spina bifida and cerebral palsy	<ul style="list-style-type: none"> » Pressure damage
Bariatric patients	<ul style="list-style-type: none"> » Pressure damage » Skin tears » Diabetic ulcers » Moisture lesions » Psoriasis » Comorbidities (e.g. diabetes, hypertension, cardiovascular disease) » Dry skin
Oncology patients	<ul style="list-style-type: none"> » Pressure damage » Skin reactions from radiotherapy treatment » Reduced wound healing » Skin infections » Cellulitis

Table 2. Risk factors to address in skin tear prevention (LeBlanc et al, 2018)

Component	Risk factors
Skin	<ul style="list-style-type: none"> » Extremes of age » Dry/fragile skin » Previous skin tear
Mobility	<ul style="list-style-type: none"> » History of falls » Impaired mobility » Dependence on assistance for activities of daily living » Medical trauma
General health	<ul style="list-style-type: none"> » Comorbidities » Polypharmacy » Impaired cognition » Malnutrition

Box 1. Extrinsic risk factor management (Wounds UK, 2018)

- Keep fingernails trimmed short
- Avoid sharp jewellery
- Pad or remove hazardous furniture to reduce the risk of falls
- Cover skin with appropriate clothing
- Wear shin guards, stockings or retention bandages
- Use emollients and other skin-friendly products

highly beneficial. The use of twice-daily emollient therapy in older people promotes general skin health and can reduce the incidence of skin tears by up to 50% (Carville et al, 2014). Skin should be gently patted dry before an emollient is applied, following the direction of the body hair, and gently smoothed in (Wounds UK, 2018), as emollients are only effective if used appropriately (Moncrieff et al, 2015). Patient acceptability is an important consideration and is key to adherence (Cowardell, 2012; Moncrieff et al, 2015).

OCTENICARE REPAIR CREME

Octenicare repair creme is formulated to protect and provide intensive care for irritated, dry, flaky and fragile skin. The creme contains three ingredients: panthenol, bisabolol and octenidine. Panthenol is the alcohol analogue of vitamin B5, which is an essential component of a normally functioning epithelium (National Center for Biotechnology Information, 2005). It is a humectant and emollient that supports skin regeneration and helps improve the skin's hydration and elasticity. The active substance within camomile oil, bisabolol has skin soothing properties. It reduces pro-inflammatory cytokine production and decreases inflammation when applied to the skin (Maurya et al, 2014). Octenidine is an agent that reduces numbers of odour-forming bacteria.

The creme is suitable for calming many common skin conditions, such as eczema and ichthyosis, helping to improve the skin's hydration and elasticity. It nourishes epithelialising wounds when used in addition to other wound-healing treatments and is also suitable for use on tattoos and as follow-up treatment for burns. As it protects against moisture damage and inhibits

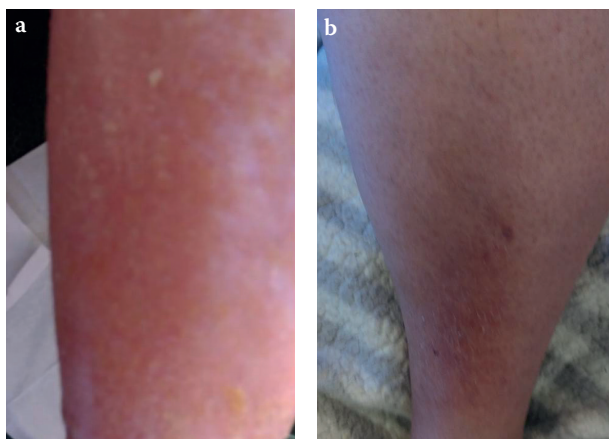


Figure 1. Case 1: (a) Dry skin as a result of wearing hosiery (Day 0). (b) Day 2.

pathogens that may cause odour, octenicare repair creme is appropriate for use on patients who experience episodes of incontinence.

This product should be thinly applied to any affected areas one to three times a day and massaged into the skin. To ensure the octenicare does not become contaminated, the person applying the creme should take care to avoid the tip of the tube from coming into contact with the epithelialised wound or area of skin being treated.

CASE STUDIES

The key objective of this case series was to evaluate the clinical performance and outcomes of octenicare repair creme on a range of skin conditions, and to evaluate the acceptability of the product to clinical staff and patients. The clinician was given guidance on the recommendations for use, in accordance with the instructions for use. Clinical judgement was encouraged, taking into account each individual patient's condition. Octenicare repair creme was used for up to 17 days and changes to skin condition and patient comfort were monitored. Clinicians also commented on the creme's features, such as ease of use and stinging on application.

Case 1: dry skin as a result of wearing hosiery

AB, an 47-year-old female patient with problems associated with obesity, presented with very dry

skin on her legs that had been exacerbated as a result of wearing hosiery over the past couple of years (*Figure 1a*). The patient reported that a lot of dead skin came off when she removed her hosiery. She found the cream she had been prescribed difficult to apply and was reluctant to wear some other creams and emollients, as they marked her clothing. The flakes of skin and marks on her clothes made her feel very self-conscious at work.

AB had a history of a leg ulcer following cellulitis approximately 6 years before. The ulcer had healed but the skin on both lower legs and feet was dry, strained and sensitive. She also had some venous hypertension. On presentation, AB reported experiencing discomfort, measuring 3 out of 10 on the visual analogue scale (where 0 is no pain and 10 unbearable pain), when anyone touched her legs and a stinging sensation when she applied some creams. It was decided to trial octenicare repair creme twice daily to moisturise the patient's lower legs and feet, and to reduce the risk of another ulcer occurring due to skin tearing. During the initial application at 9am, the practitioner reported that the cream was easy to apply, did not clump and went on smoothly. At 7pm that evening, the skin looked less dry than it had in the morning. AB reported reduced pain since the cream had been applied that morning and only experienced mild discomfort during both applications, as her skin was very sensitive. She said she had decided to apply octenicare early in the evening to give it time to soak in before going to bed.

Two days after starting treatment, AB's legs were less scaly than they had been (*Figure 1b*), and she reported no pain during or between applications. After 5 days, her legs and feet were well moisturised. She said that the cream left her legs feeling nice, did not stain the bed covers or make them greasy, even when applied just before going to bed, and that she had no problems applying the product herself.

A week into treatment, the suppleness and integrity of AB's skin was greatly improved. She was delighted with the results and was confident enough to remove her hosiery when she went swimming — something she had avoided doing in the past due to concerns about dead skin flaking off.



Figure 2. Case 2: (a) Day 0. (b) Day 4.

Case 2: hyperkeratosis

LP is a 72-year-old woman living in assisted accommodation who presented with a leg ulcer and hyperkeratosis that was difficult to manage, (Figure 2a). She was reluctant to use very greasy emollients and had tried a number of different creams in the past.

The patient had a history of obesity, diabetes, lymphoedema and arthritis. She was taking analgesia for her arthritis, but not for diabetes. Her legs were not currently causing her pain, although they had been painful in the past. Previously, there had also been a large build-up of skin plaques, but malodour was never an issue.

LP was put on a twice-daily octenicare repair creme regimen to moisturise the affected area and lift the hyperkeratosis plaques. LP experienced no pain when the cream was applied. The practitioner said the cream had a good consistency, as it was “not too greasy or hard”.

At her review 3 days later, the dead, scaly plaques were lifting away from the healthy skin on LP’s legs. The skin was more pliant than it had been at the initial presentation. LP’s carers had found the cream very easy to apply and the patient was happy with the improvement.

Four days later, LP’s legs were dry and flaky but the plaques were gone, and her skin was generally looking much better (Figure 2b). Her carers were continuing to apply octenicare twice daily and LP requested more, as she wanted to continue with the treatment regimen. LP needed to wear compression stockings because of her lymphoedema but had not tolerated compression in the past. The practitioner suggested that now LP’s legs were looking better, she should try compression again, starting with a stocking size she was comfortable with. The patient agreed she was “willing to give it a go”.

LP and the clinician were highly satisfied with the outcome of treatment. In the past, occasionally carers had hurt LP’s legs while applying creams. She reported that the application of octenicare was easy and painless. She also said that it did not sting or itch, unlike other creams she had tried. LP was much more confident a week after starting her twice-daily octenicare repair creme regimen and decided to continue using it.

Case 3: sacral excoriation following faecal incontinence

WW is an 87-year-old woman with wheat intolerance that had resulted in several episodes of loose bowels over the previous 12 months. Each episode of faecal incontinence had caused very painful sacral excoriation. WW was reluctant to allow staff at the nursing home she resided in to help her with washing and the application of cream to the sacral area due to the pain of the excoriation and the stinging caused by creams she had been prescribed in the past.

The most recent episode of faecal incontinence had occurred 2 days prior to presentation and the patient said her current pain level was 7 out of 10 on the visual analogue scale. WW was given octenicare repair creme to relieve the inflammation caused by faecal contact with the skin and to aid healing of the excoriated area (Figure 3a). When it was first applied, she said the cream was soothing and did not sting.

At follow up 4 days later, the sacral area was macerated but less inflamed. WW said she was in considerably less pain (3 out of 10 on the visual analogue scale) between applications and that octenicare was less painful to apply than it had been on day 1. It was decided to change WW’s incontinence pad to reduce the amount of time her skin was exposed to faeces and address her diet to reduce the associated faecal incontinence in the future. After a further 5 days, the patient reported no pain during or between octenicare applications and the skin was continuing to show improvement. The patient was using different continence pads and was following a wheat-free diet.

Seventeen days after starting octenicare, the sacral area was discoloured but the maceration and inflammation had resolved and the skin was mostly intact (Figure 3b). The patient noted that the skin around her sacral area had improved much faster than it had following past episodes of faecal incontinence. She was highly satisfied with the treatment, saying: “The cream is nice. It does not hurt to have the nurses put it on. And it has taken the stinging pain from my bottom.” The nurses at the nursing home felt

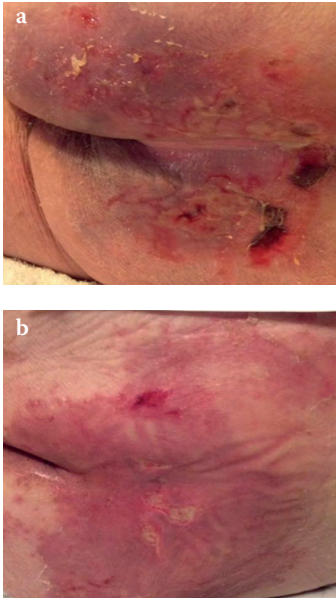


Figure 3. Case 3: (a) Day 0. (b) Day 17.

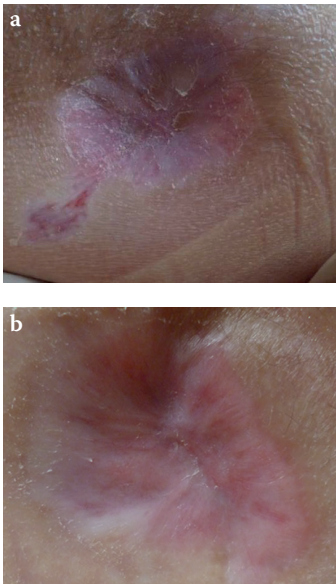


Figure 4. Case 4: (a) Day 0. (b) Day 8.

This case study series was supported by Schülke.

octicare was very effective and had helped with compliance. They also reported that they had been able to see a marked change in the condition of the skin in the sacral area.

Case 4: pressure ulceration of the buttock

DG is a 47-year-old man with multiple sclerosis who is reliant on his carers for all of his care needs. He has several healed pressure ulcers that keep breaking down, as his skin gets very dry and frequently splits.

DG presented with skin damage on the right buttock cheek (Figure 4a). This damage was in the same area as a pressure ulcer that had developed 4 years prior to presentation. This ulcer had healed 2 years before, but DG said that the skin in this area splits every few months because it gets very dry. DG has no feeling in his lower body as a result of his multiple sclerosis, so the right buttock was not causing him any pain. He was given octenicare repair creme to moisturise the area and his carers were advised to apply it daily as well as regularly repositioning him on his mattress to relieve pressure on this and other vulnerable areas.

When he was followed up 2 days later, the skin of his right buttock was less dry and flaky. The carer who was present reported that the cream was easy to apply and seemed to be absorbed into the skin. DG was happy with the initial effects of treatment and noted that octenicare did not smell, unlike some other creams. It was proposed that a chart be used to ensure that octenicare was applied as prescribed.

Six days after starting octenicare, the skin had greater suppleness and was smoother to the touch. The scar itself was less angry and inflamed. It was felt that, as a result of treatment, the area was less vulnerable to splitting.

After 8 days, the skin of the buttock was no longer dry (Figure 4b). DG was shown pictures of the affected area of his buttock and was highly satisfied with the improvements he saw. DG's carers liked the cream, as they found it easy to apply. They were also regularly repositioning him on his mattress and using the cream chart as advised, and this had led to an improvement in his overall wellbeing, as he was able to get up for a few hours each day.

CONCLUSION

In this case series, octenicare repair creme reduced skin dryness, scaliness and flakiness, as well as improving skin suppleness, smoothness and integrity in a variety of conditions. Patients found the creme smooth and comfortable on application and healthcare professional/carers found it to be effective and easy to apply. All parties were pleased with the treatment outcomes and the staff would all consider using this product again. In conjunction with the octenicare repair creme and other changes to their treatment regimens, cases 3 and 4 had marked improvements in quality of life. **WUK**

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