

Treatment of recurring pressure ulcer over the left ischium with a silicone foam dressing

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Introduction

An immobile patient with urinary and faecal incontinence presented with a recurring pressure ulcer over the left ischium after flap surgery. Appropriate repositioning could not prevent the pressure ulcer. The patient sits every day for about 4-6 hours in a wheelchair with a gel-chair cushion for pressure relief, but without structured instruction for correct repositioning and mobilisation.

Patient



51-year old male with chronic progressive encephalomyelitis with tetraspasticity in both arms and legs. Urinary and faecal incontinence. Multiple Sclerosis for 20 years with progressively limited movement and a significant deterioration in general condition and nutrition status. His wife does the general nursing and a wound specialist from a home care institution manages the wound treatment.

Initial wound assessment



Size of wound	Length	60	mm
	Width	35	mm
	Depth	20	mm

For tissue type and exudate, write findings
 For others, mark "x" for positive findings from assessment,
 and mark "0" if not present

Wound bed assessment

- Tissue type
- Exudate
- Infection

Wound edge assessment

- Maceration
- Dehydration
- Undermining
- Thickened/rolled edges

Periwound skin assessment

- Maceration
- Excoriation
- Dry skin
- Hyperkeratosis
- Callus
- Eczema

Management goals

Mark "x" for all appropriate management goals

Wound bed assessment

Management goals

- Remove non-viable tissue
- Manage exudate
- Manage bacterial burden
- Rehydrate wound bed
- Protect granulation/epithelial tissue

Wound edge assessment

Management goals

- Manage exudate
- Rehydrate wound edge
- Remove non-viable tissue
- Protect granulation/epithelial tissue

Periwound skin assessment

Management goals

- Manage exudate
- Protect skin
- Rehydrate skin
- Remove non-viable tissue

Treatment before using Biatain Silicone

The wound was being treated during the past five months with silver alginate and polyurethane foam dressings and, when necessary, autolytic debridement of necrotic tissue was performed. There was a persistent infection in the wound that was caused by new necrotic tissue being formed over and over again in the wound bed. Extensive surgical debridement procedures were performed. This was followed by antimicrobial therapy with a silver-containing alginate in the undermining part of the wound (approx. 5 cm).

Treatment with Biatain Silicone

Biatain Silicone Sacral was used for exudate management and was changed every two days. Exudate management and the conformability of the dressing to the wound bed combined to protect the periwound skin as well as the wound edge from maceration. Pressure relief as well as a high-calorie diet supplemented with vitamins was initiated.

Given the patient's urinary incontinence, suprapubic catheterization was performed to relieve urinary retention. Physical therapy was also started because the patient was immobile due to spasticity in his arms and legs.

Results

Altogether, surgical debridement was performed 3 times within 6 days and Biatain Silicone Sacral was used. This resulted in a wound bed free from necrosis and infection. After 8 days, granulation tissue was present in the wound bed and local antimicrobial therapy was stopped. An alginate was no longer needed for the undermining part of the wound (position 5 on the clock); only Biatain Silicone Sacral was used. The dressing was changed every two days for the first 20 days; thereafter, it was changed every third day. The dressings exudate management and conformability to the wound bed protected the periwound skin and the wound edge from maceration. Granulation and epithelial tissue was observed, which reduced the wound size. Wound contraction was observed on day 12 in the undermining area. No secondary infection was observed. The dressing provided a moist wound healing environment and also prevented maceration of the wound edge and periwound skin. The wound was also treated with Octenisept antiseptic for the first 10 days. Later, the wound was cleansed with a Ringer-solution at every dressing change.

The wound size was reduced by almost 50% within 29 days.



Day 8



Day 10

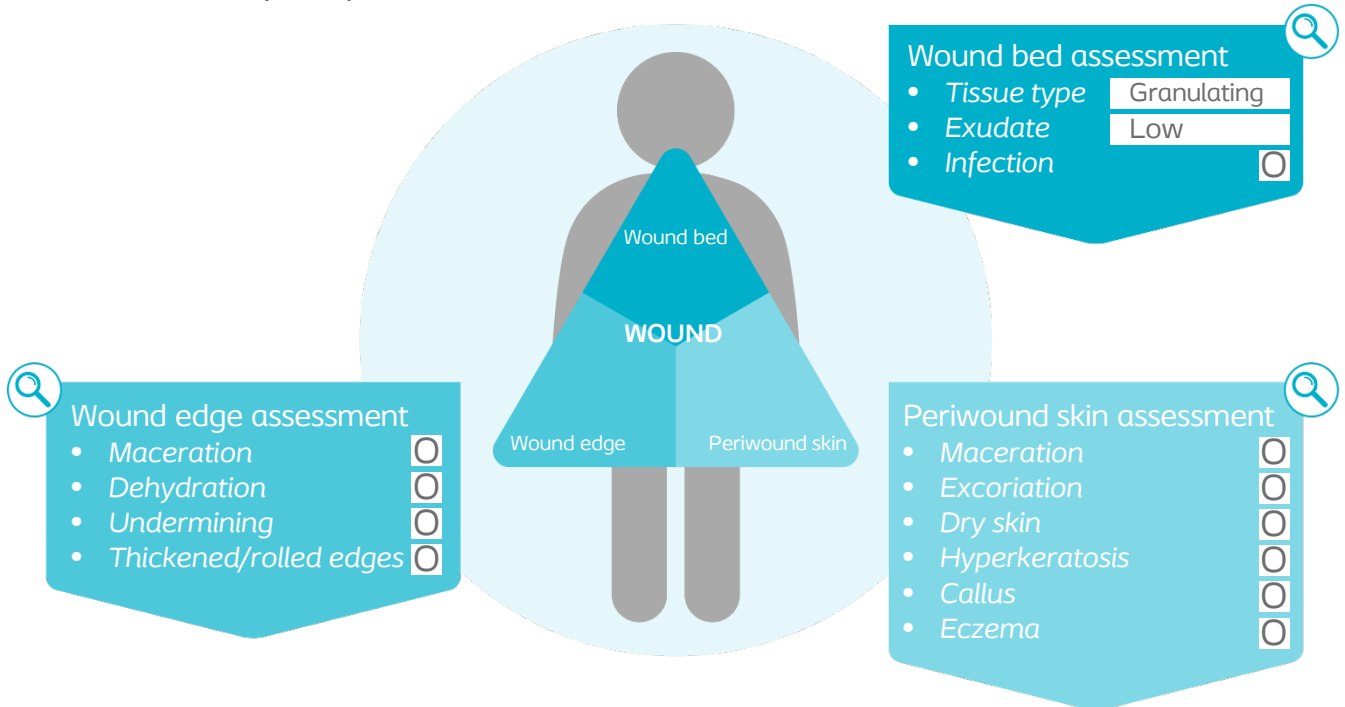


Day 29

Reassessment of the wound at the end of case period

For tissue type and exudate, write findings

For others, mark "x" for findings from assessment, and mark "0" if not present



Conclusion

The correct intervals between dressing changes and the vertical absorption of exudate by Biatain Silicone Sacral prevented maceration of the wound edge and periwound skin. The 2 cm deep wound did not need filler because the dressing conformed down to the wound bed. The undermining part of 5 cm of the wound edge needed a silver-alginate as filler, but only at the beginning. After 8 days this too was no longer needed because the wound was granulating in this area. It is important not to clean or touch the undermining area at this stage. As levels of exudate decreased, the intervals between dressing changes was prolonged while a sufficient moist wound healing environment was maintained. Biatain Silicone Sacral never adhered to the wound bed. The vertical absorption of the dressing and its close conformability to the wound bed protected the wound edge and periwound skin from maceration.