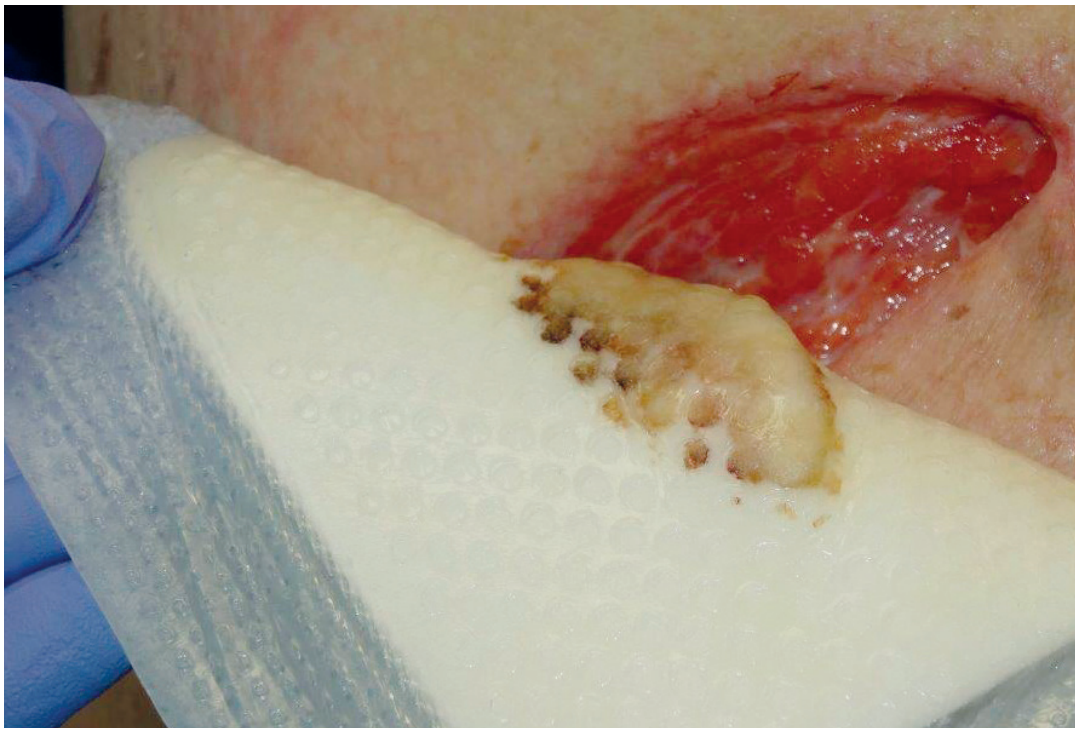
3DFit® Technology

Conformability of ***Biatain® Silicone*** in clinical practice



Coloplast

Treatment of a postoperative abdominal wound with a silicone foam dressing

Bernd von Hallern DGKP, Praxis Dr. R.v.d.Daele Germany

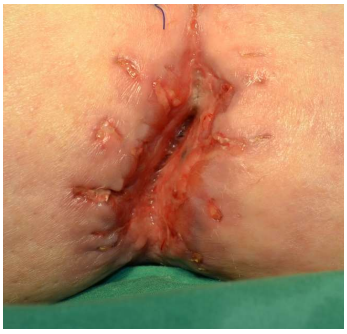
Introduction

Patient with cancer of the uterus, which lead to removal of uterus and both ovaries via a laparotomy incision. After an initial complication free postoperative period, a wound dehiscence occurred after three weeks.

Patient

68-year-old obese and mobile female patient with a learning disability. She does not smoke or drink alcohol. No known Co-morbidities and lives in her home and works in a facility for adults with learning disability. Wound suture dehiscence occurred after three weeks, followed by a deep infection which was developed over the whole, approximately 350 mm long surgical wound. The wound was initially managed with NPWT. A closure by secondary intention took place after 14 days. In the distal wound pole (6 on the clock) a wound dehiscence re-occurred. After removing a number of sutures and performing debridement, wound management was performed outside of the hospital.

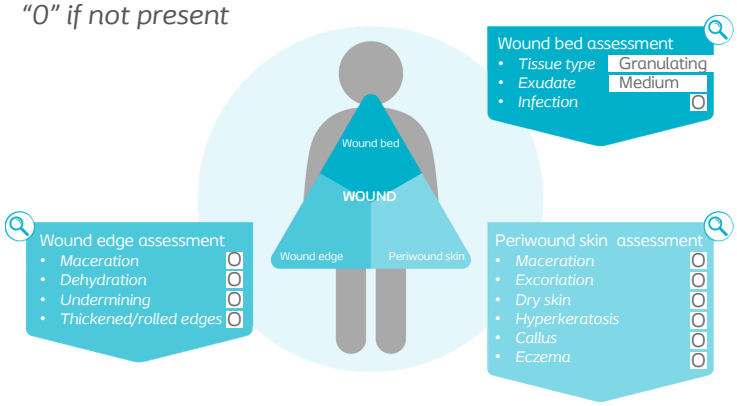
Initial wound assessment



Size of wound

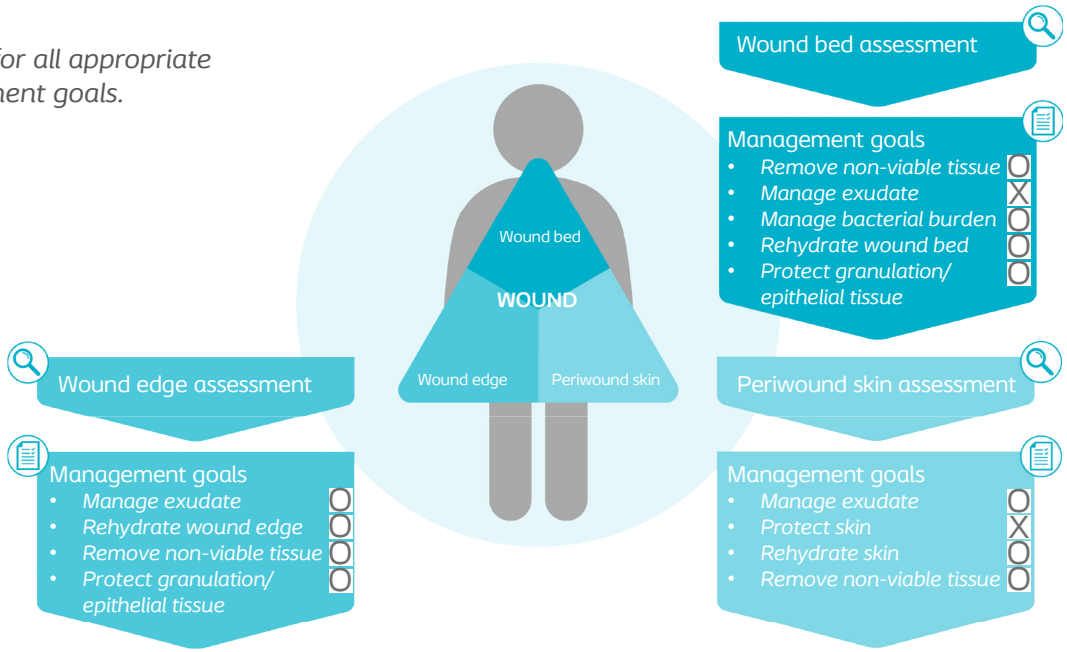
Length	**80**	mm
Width	**22**	mm
Depth	**12**	mm

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



Management goals

Mark "x" for all appropriate management goals.



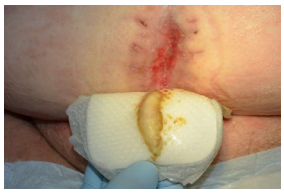
Treatment

At the beginning of the wound management, the wound was opened at the lower end of the wound. It was then cleansed and rinsed with Ringer solution. Biatain Silicone was used to cover the wound and to manage the exudate. Due to the obesity which resulted in belly folds, there were some challenges in applying the dressing. The wound was exuding moderately and the first dressing change was done after 24 hours. The excellent absorption capacity of the foam dressing then allowed a 2-day interval for dressing change. No maceration at the wound edge or periwound skin was observed. After 14 days, the wound size had been reduced to 55 x 12 mm by contraction, granulation and epithelialization. The depth of the wound was 4 mm. The dressing change intervals could then be extended to 3-4 days due to only small levels of exudate. On day 30, the wound was closed.

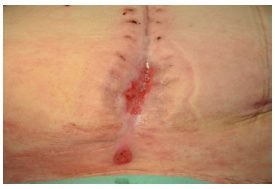
Results

Despite the challenging location amongst the skin folds, it was easy to apply Biatain Silicone. The dressing was able to conform rapidly into the wound cavity. The wound edge and periwound skin were successfully protected against the often very aggressive exudate. The dressing ensured good skin adhesion and painless removal. A wound filler was not needed for this wound. The patient appreciated the possibility to take showers, the dressing stayed in place and did not fall off.

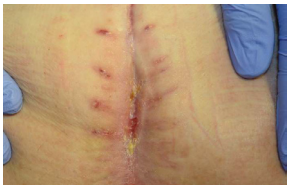
DAY 3



DAY 14

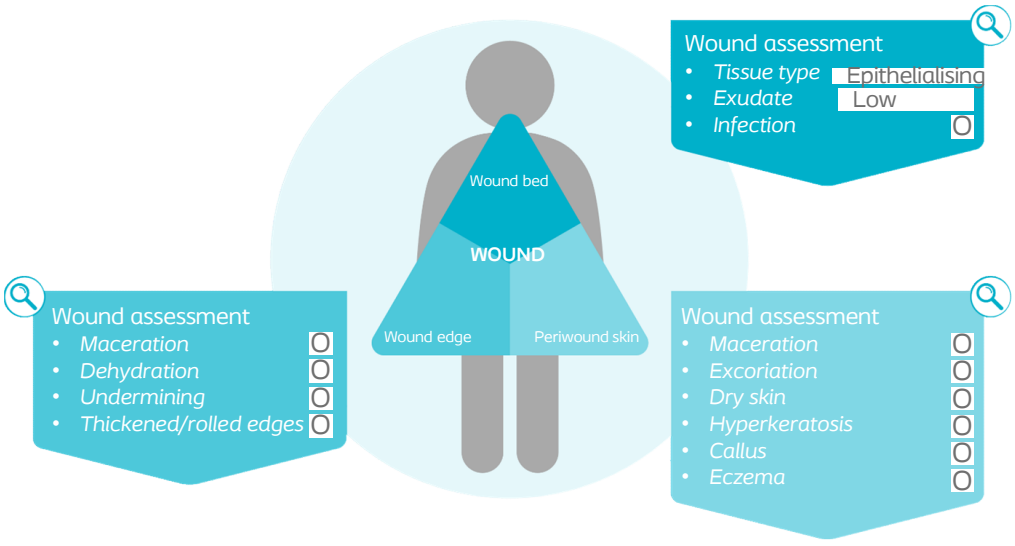


DAY 30



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 high absorption capacity of Biatain Silicone, combined with longer dressing change intervals, and absence of an additional wound filler, resulted in cost savings for every dressing change. The dressing protected the newly formed granulation tissue, despite skin folds being present. No maceration of the wound edge or periwound skin was observed and it did not create any therapy interruption and therefore the potential risk of secondary infections was reduced.

Venous Leg Ulcer treated with a silicone foam dressing

Bernd von Hallern DGKP, Praxis Dr. R.v.d.Daele Germany

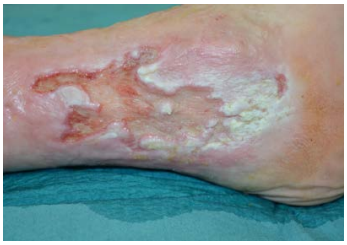
Introduction

A patient with a recurring venous leg ulcer over the last 40 years. The wound occurred for the first time after a fracture of the left lower leg. A thrombosis in the leg occurred in the postoperative phase after the fracture. The leg ulcer has now been present for 20 months without any wound progression.

Patient

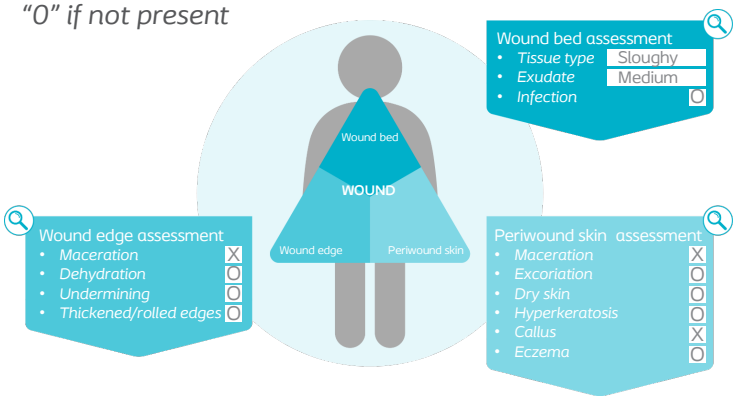
87 years old patient who lives at home with some restriction on mobility. The wound size is 145x65 mm and 4 mm deep. Location of the wound is on inner side of the left leg. The wound is managed with a super absorber and foam dressing. The dressing is changed every two days. Maceration is present on both the wound edge and the periwound skin. Compression therapy with compression bandages is part of the protocol of care.

Initial wound assessment



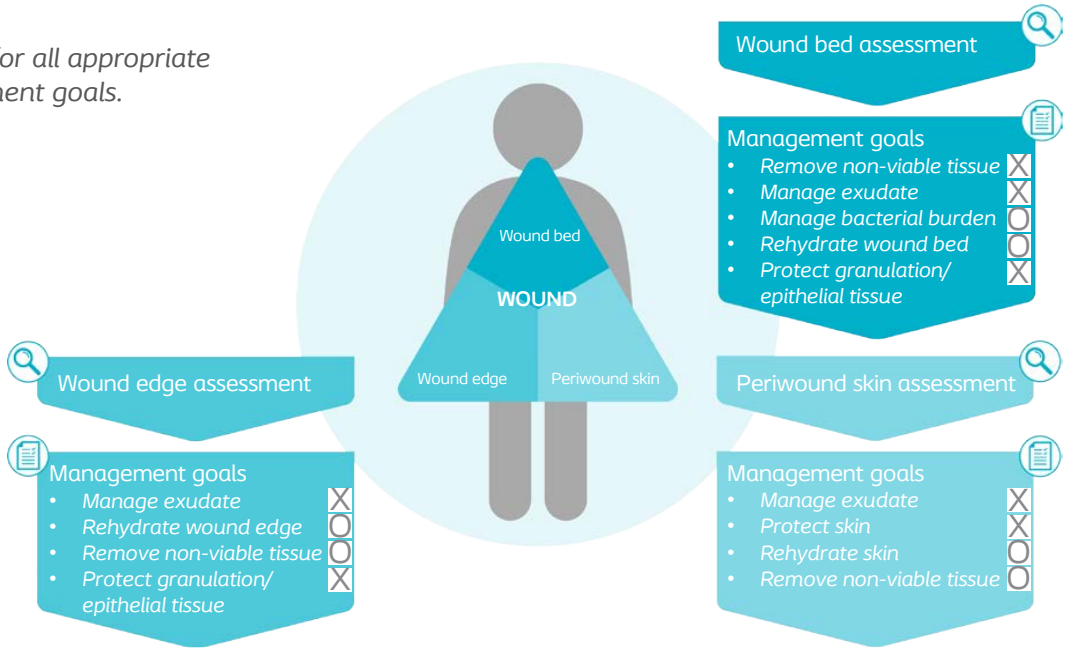
Size of wound		
Length	**145**	mm
Width	**65**	mm
Depth	**4**	mm

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



Management goals

Mark "x" for all appropriate management goals.



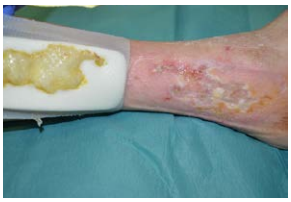
Treatment

At the start of the treatment the wound size was 151x65x4 mm. Compression therapy was part of the protocol of care At the beginning of the treatment, mechanical debridement was carried out at every dressing change and a wound rinsing solution was used. The wound was left open for approximately 30 minutes to remove excess exudate. After reduction of the maceration a skin barrier was used and then Biatain® Silicone was applied. The next change was dressing was after 2 days and the macerated areas of the wound edge and periwoundskin had improved After 14 days the wound was clean with moderate levels of exudate. The interval of the dressing change from day 1-14 was 3 days but was changed to every 2 days due to the amount of exudate. During the treatment, granulation tissue was observed and a skin barrier was no longer needed. Biatain Silicone was used alone for exudate management and protected the wound edge and periwoundskin from maceration.

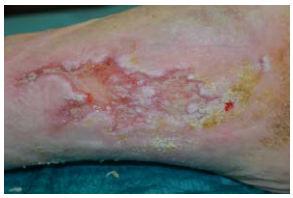
Results

Biatain Silicone provided good exudate management and conformability to the wound bed and protected the wound edge and periwound skin from maceration. New granulation tissue was observed and the wound size was reduced. The change of the dressings have to be adapted according the amount of the exudate to avoid too much moisture to the wound and the periwound skin. For the wound bed, conforming dressings with a vertical absorption of the exudate can not only prevent maceration of the wound edge and the periwound but can also reduce the risk of infection. The wound was completely healed after three months.

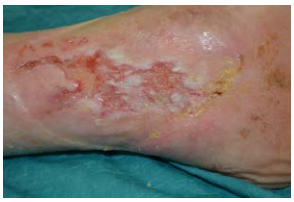
DAY 2



DAY 14

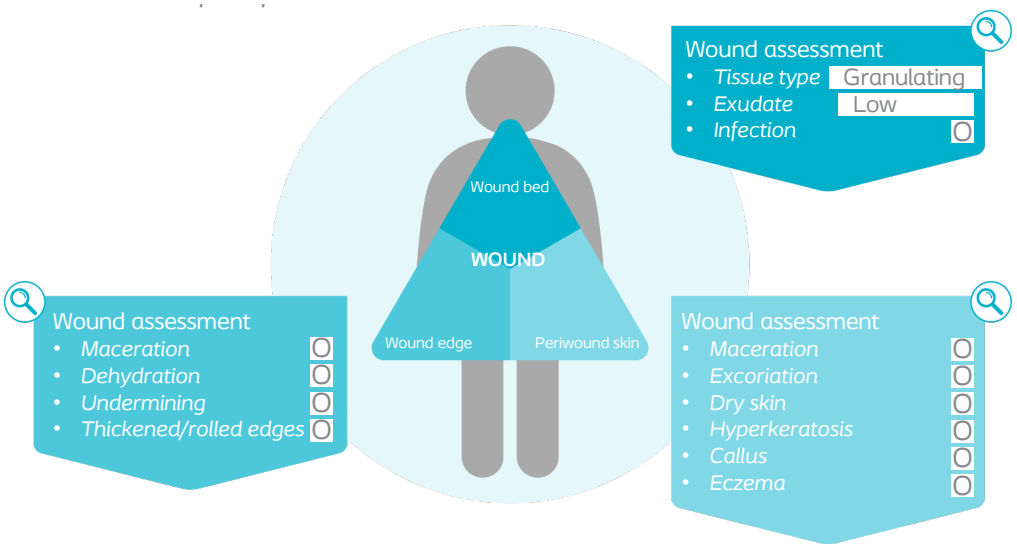


DAY 30



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 conformability of Biatain Silicone in combination with the soft silicone adhesive allowed good adhesion even on macerated areas of the wound edge and periwound skin. No additional wound care products was used during the treatment and dressing change intervals was every three days.

Pressure ulcer on the right lower limb

Bernd von Hallern DGKP, Praxis Dr. R.v.d.Daele Germany

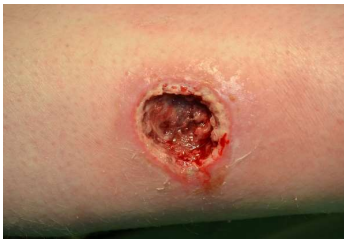
Introduction

The patient suffers from a neuro degenerative disorder, which ultimately leads to reduction in cognitive and motor skills. Pressure ulcer was present on the right lower limb.

Patient

A 28-year-old patient, immobile, blind and mute came into the emergency room with an increasing dyspnoea and oedema. As a secondary finding, a pressure ulcer was observed on the right lower limb which was triggered by continuous pressure from the wheelchair. According to the patient´s parents, the pressure ulcer had been present for 8 weeks. The previous treatment consisted of applying a silicone gauze to the skin necrosis and compression dressings. Different methods of pressure relief had always failed.

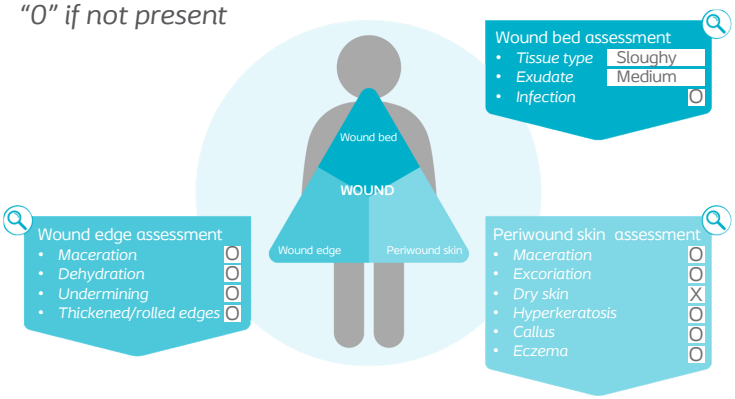
Initial wound assessment



Size of wound

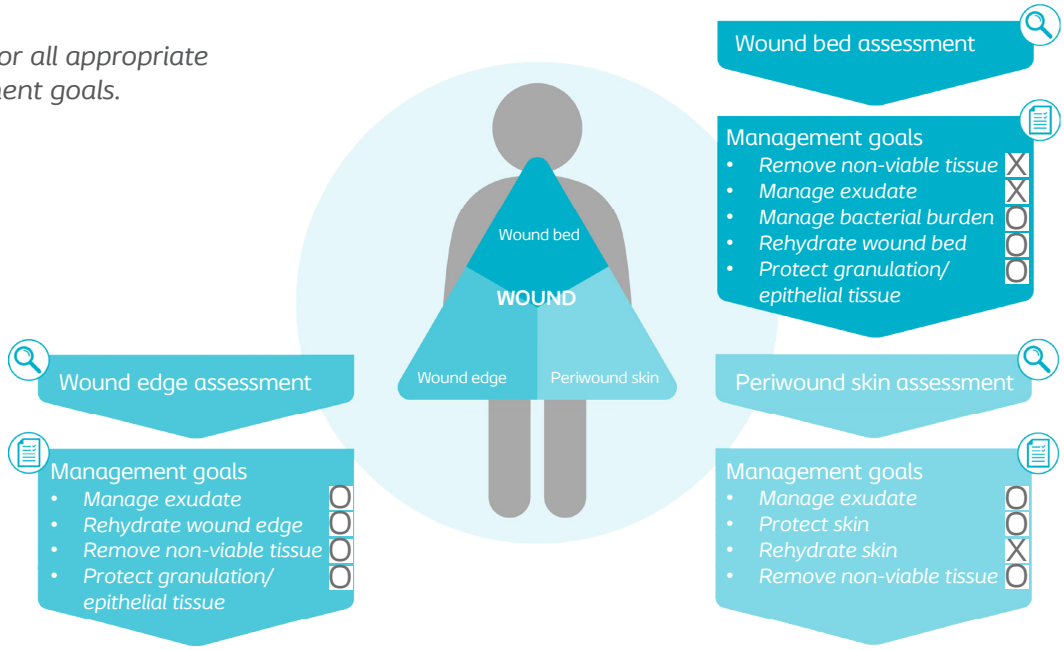
Length	**30** mm
Width	**30** mm
Depth	**10** mm

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



Management goals

Mark "x" for all appropriate management goals.



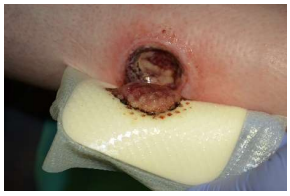
Treatment

At the initial wound assessment, a black skin necrosis, about 3 cm in diameter, was removed. A 10 mm deep wound cavity was formed. Wound cleansing with an antiseptic wound irrigation solution and application of Biatain® Silicone was initiated. As no signs of infection were visible there was no need for an antibacterial wound dressing. Initially, daily dressing changes was performed, this was related to the higher exudate levels. The dry periwound skin was rehydrated with barrier cream. On day 7 of wound treatment with daily successive debridement, a 15 mm deep wound was still present. There were recurring wound necrosis, which was removed at each dressing change. The wound diameter increased to 34 mm. The level of exudate was reduced over time and the dressing change interval was changed to every second day. On day 19 of wound treatment, a clean and necrosis free wound with granulation in the wound bed was observed. The wound depth was 12 mm and the wound diameter 34 mm. No maceration at the wound edge or periwound skin was observed. Initial oedema was significantly reduced by medication. The dressing intervals was increased from day 24 to every third day. The wound depth decreased slowly and at the end of the wound treatment, the skin level was reached by granulation tissue forming in the wound bed. On the 56th day of treatment, the diameter of the wound had been reduced by 8 mm. The wound depth was 0 mm with granulation tissue present.

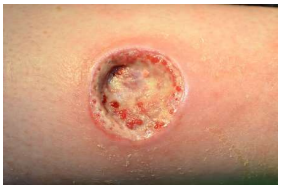
Results

Intensive wound management lead to granulation tissue in the wound bed in a manageable time frame. No maceration of the wound edge or periwound skin was observed during the treatment. A wound filler was not used, as Biatain® Silicone foam dressing very quickly conformed to the wound bed. The dressing protected the wound edge and the periwound skin from exudate and potential maceration. The attempts from the parents to get a pressure relief for the leg by different methods was not always successful.

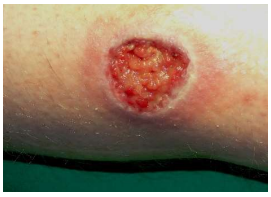
DAY 7



DAY 19

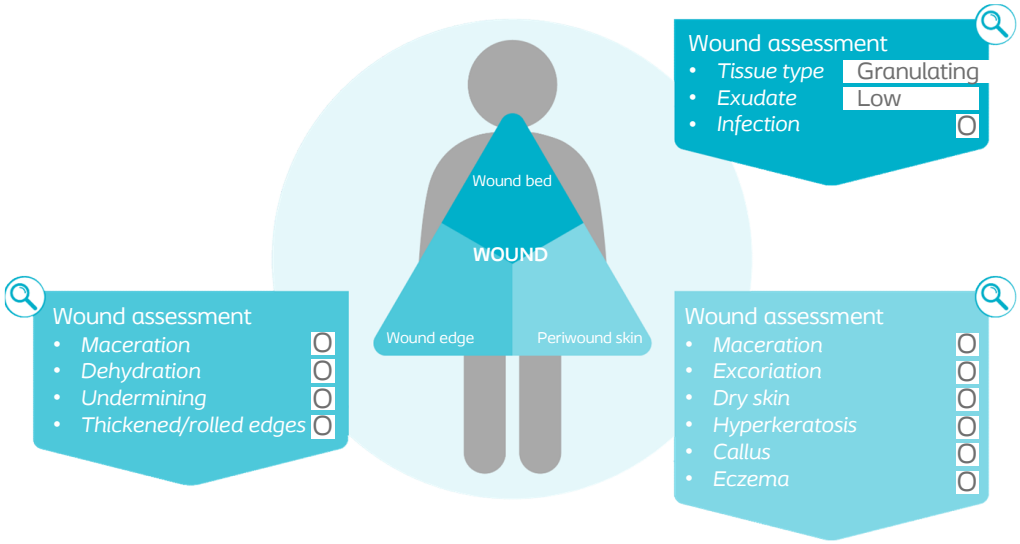


DAY 56



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

Intensive wound treatment resulted in granulation tissue forming in the wound bed. Biatain Silicone managed the exudate very well and the dressings ability to conform to the wound bed prevented maceration of the wound edge and periwound skin.

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

Bernd von Hallern DGKP, Praxis Dr. R.v.d.Daele Germany

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

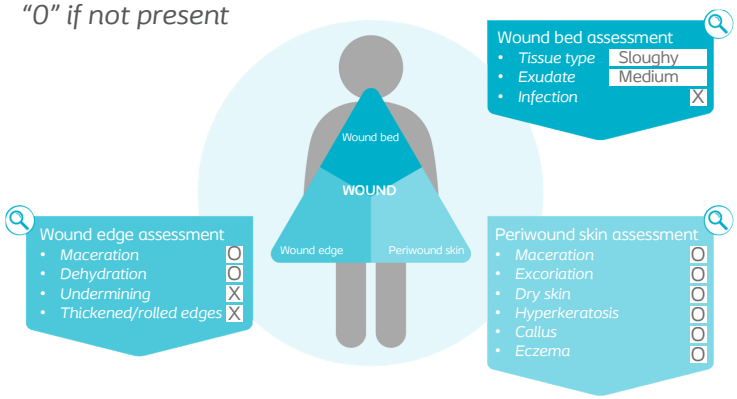
51-year old male with chronic progressive encephalomyelitis with tetraspasticity in both arms and legs. Urinary and faecal incontinence. Multiple Sclerosis for 20 years with progressively limited movement and a significant deterioration in general condition and nutrition status. His wife does the general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

Initial wound assessment

Size of wound

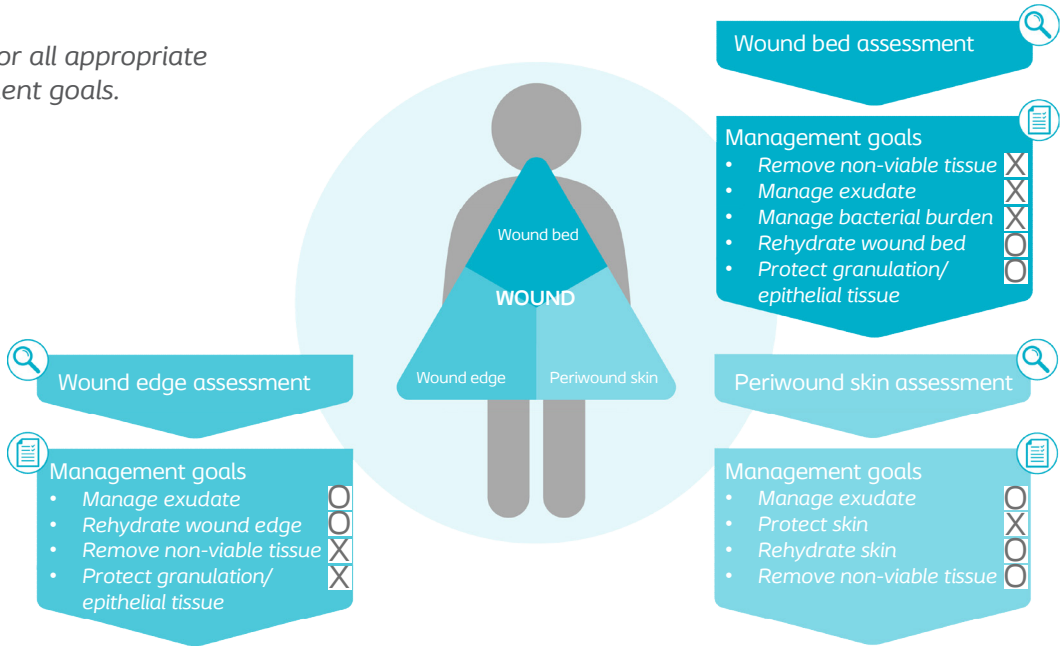
Length	**60**	mm
Width	**35**	mm
Depth	**20**	mm

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



Management goals

Mark "x" for all appropriate management goals.



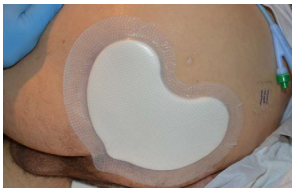
Treatment

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.

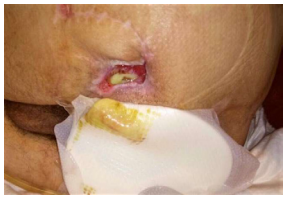
Results

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. There was no moisture eczema, as seen with other Pressure ulcer dressings, because Biatain Silicone Sacral absorbs exudate vertically without lateral spread in the dressing. 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



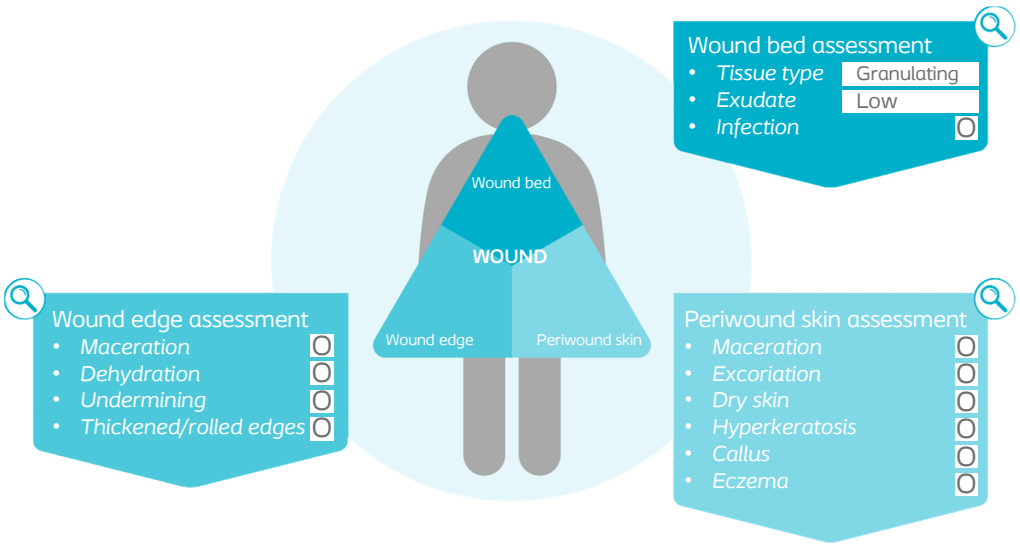
DAY 10



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.



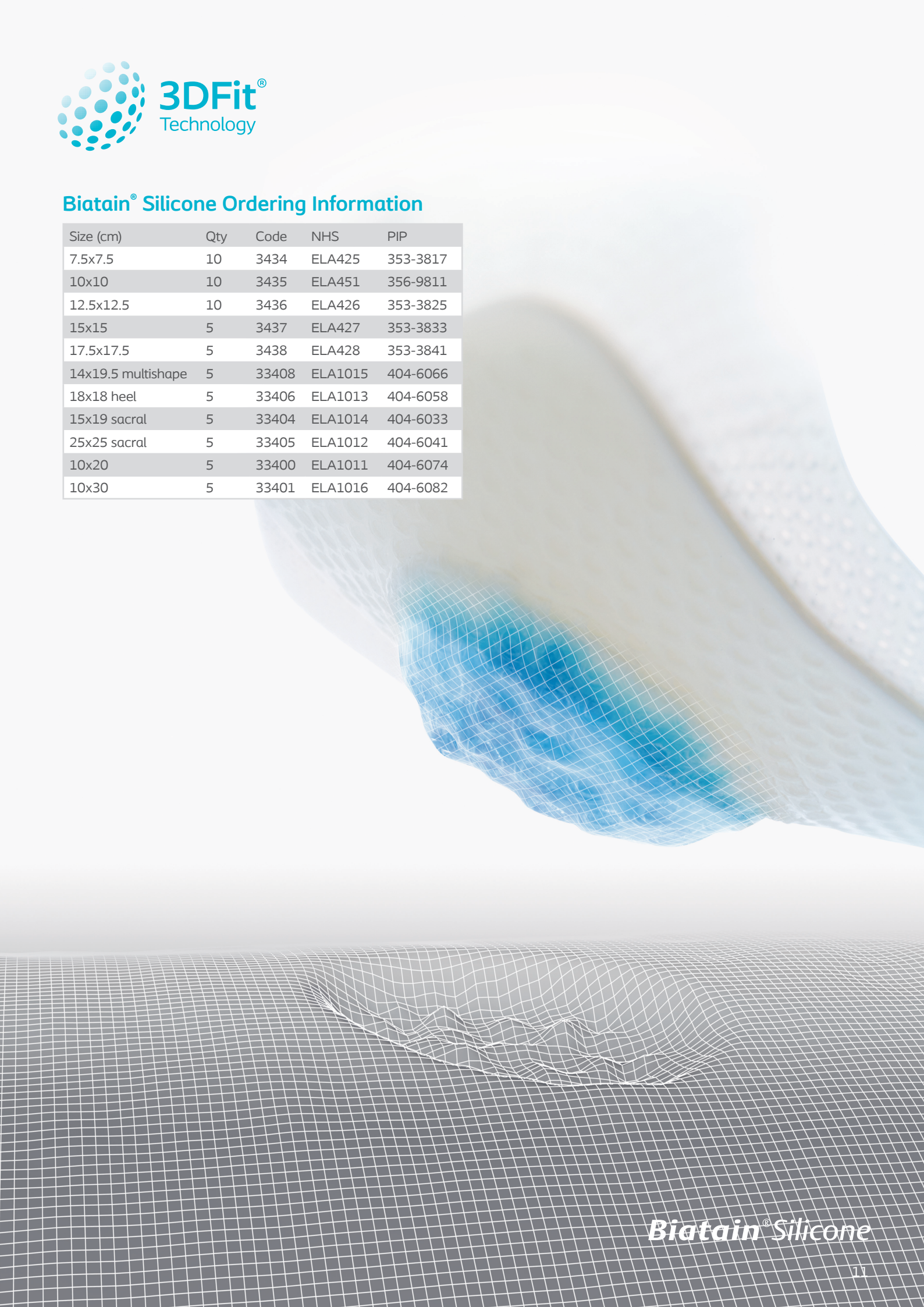
Conclusion

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. Biatain Silicone Sacral was an optimal wound dressing choice for this individual's pressure ulcer, both from a wound management perspective and on aspects of cost effectiveness.

3DFit® Technology

Biatain® Silicone Ordering Information

Size (cm)	Qty	Code	NHS	PIP
7.5x7.5	10	3434	ELA425	353-3817
10x10	10	3435	ELA451	356-9811
12.5x12.5	10	3436	ELA426	353-3825
15x15	5	3437	ELA427	353-3833
17.5x17.5	5	3438	ELA428	353-3841
14x19.5 multishape	5	33408	ELA1015	404-6066
18x18 heel	5	33406	ELA1013	404-6058
15x19 sacral	5	33404	ELA1014	404-6033
25x25 sacral	5	33405	ELA1012	404-6041
10x20	5	33400	ELA1011	404-6074
10x30	5	33401	ELA1016	404-6082



Coloplast develops products and services that make life easier for people with very personal and private medical conditions. Working closely with the people who use our products, we create solutions that are sensitive to their special needs. We call this intimate healthcare.

Our business includes Ostomy Care, Continence Care, Wound and Skin Care and Urology Care. We operate globally and employ about 11,000 employees.

Ostomy Care / Continence Care / Wound & Skin Care / Urology Care

Coloplast A/S, Holtedam 1, 3050 Humlebaek, Denmark

Coloplast