Pressure ulcers – prevention and treatment

A Coloplast quick guide

Table of Contents

Pressure ulcers – prevention and treatment

According to recent literature, hospitalizations related to pressure ulcers cost between $9.1 to $11.6 billion per year. The cost of individual patient care per pressure ulcer may range from $20,900 to $151,700. In 2007, Medicare estimated that each pressure ulcer added an additional $43,180 in costs to a hospital stay.[1] Understanding the challenges pressure ulcers present to the patient and health system, education regarding their prevention and treatment is increasingly important. All providers and care-givers involved in the continuum of patient care should have access to tools which provide general knowledge on how to effectively tackle this condition.

In an effort to support your health system's goals on providing education on pressure ulcer prevention and treatment, Coloplast has published this quick-guide. This guide is intended for educational and informational purposes only. It contains key recommendations for the prevention and treatment of pressure ulcers, and will be helpful to health care professionals who are not dealing with pressure ulcers on a day-to-day basis.

For further information on this topic, please refer to the Wound, Ostomy, Continence Nurses Society (wocn.org) for their "Guideline for Prevention and Management of Pressure Ulcers" and the NPUAP/EPUAP (npuap.org) for their "Pressure Ulcer Prevention & Treatment: Clinical Practice Guideline". Useful tools for pressure ulcer prevention are also available at the Braden scale website (www.bradenscale.com)

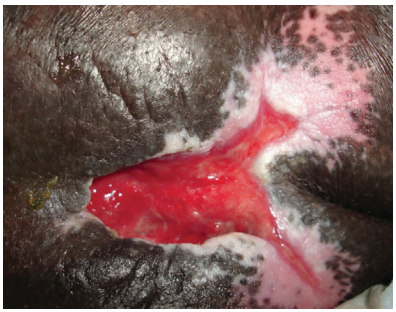
Coloplast Corp., April 2012.

What is a pressure ulcer?

International NPUAP-EPUAP pressure ulcer definition:

A pressure ulcer is a localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear.[2]

Pressure ulcers are a major cause of morbidity and mortality, especially for persons with impaired sensation, prolonged immobility, or advanced age.



Coccyx, Stage III

Knee, Stage IV

How do pressure ulcers occur?

A pressure ulcer is the result of a degenerative change caused by biological tissue (skin and underlying tissue) being exposed to pressure and shear forces. The increased pressure prevents the blood from circulating properly, and causes cell death, tissue necrosis and the development of pressure ulcers.

Heel, Unstageable

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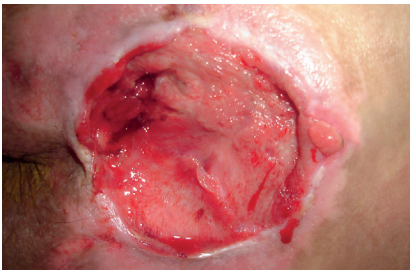

Coccyx, Stage IV

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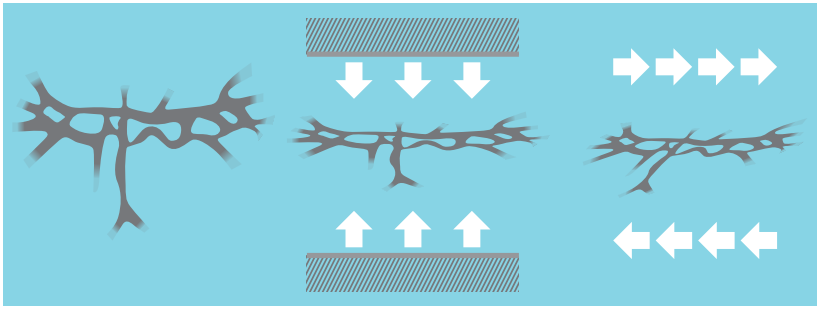
The effect of pressure and shear forces on tissue and blood supply



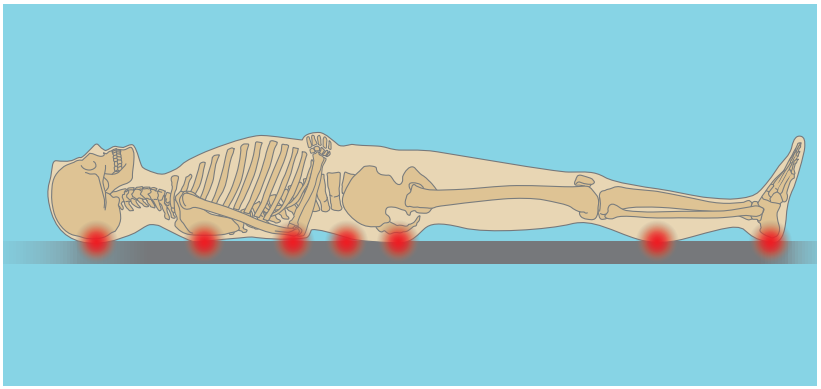
Without load | Pressure | Shear forces

Who develops pressure ulcers?

Anyone is at-risk for the development of a pressure ulcer, but some are more likely to develop one than others. This is particularly true for those with impaired sensation, prolonged immobility and advanced age.

Whether young or old, if somebody with frail skin remains in one position for too long without shifting their weight, they are at-risk for pressure ulcers. Wheelchair users or people confined to a bed (for example, after surgery or an injury), are especially at-risk and those people who have a pressure ulcer are at an even greater risk for developing another pressure ulcer.

The most common sites for pressure ulcers to occur are over a bony prominence, such as the buttock (sacrum/ischium), heels, hips (trochanter), elbows, ankles (lateral and medial malleolus), back, shoulders, back of the head (occipit) and ears.



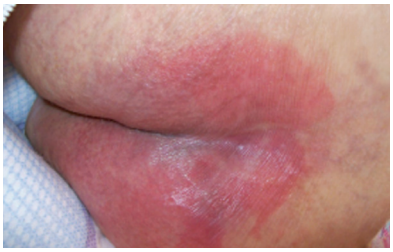
Common sites of pressure ulcers

Prevalence of pressure ulcers

National prevalence studies have been conducted in several countries. Prevalence studies, among patients in acute care hospitals, indicated a pressure ulcer prevalence ranging from 10.1% to 17%.[3] Recently, 5947 patients were surveyed in 25 hospitals in five European countries. The pressure ulcer prevalence (Stage 1–4) was 18.1%. If Stage 1 pressure ulcers were excluded, the prevalence was 10.5%. The sacrum and heels were the most affected sites. Only 9.7% of the patients in need of prevention received fully adequate preventative care.[3]

Vertebrae, Unstageable

Buttocks, Stage II



Buttocks, Stage I

Heel, Stage III

Risk factors

The following factors increase the risk for pressure ulcers[4]

- Bed or chair-bound
- Advanced age (>65 years)
- Unable to move body or parts of body without help
- Chronic conditions, such as diabetes or vascular disease, which affect perfusion (blood circulation)
- Mental disability from conditions such as dementia
- History of previous ulcer
- Urinary and/or fecal incontinence
- Inadequate/poor nutrition and/or dehydration
- Diastolic pressure <60 and/or hemodynamic instability

The NPUAP/EPUAP pressure ulcer prevention and treatment guidelines recommend to use a structured approach for risk assessment to identify individuals at-risk of developing pressure ulcers. One of the most widely used risk assessment tools is the Braden Scale for Predicting Pressure Sore Risk®, developed by Barbara Braden, PhD, RN and Nancy Bergstrom, PhD, RN, FAAN (bradenscale.com).

The Braden scale for predicting pressure ulcer risk

The Braden scale is a clinically validated tool that allows nurses and other healthcare providers to reliably score a person's level of risk for developing pressure ulcers by assessing six subscales:[5]

- **Sensory Perception** – ability to respond meaningfully to pressure-related discomfort (1–4)
- **Moisture** – degree to which skin is exposed to moisture (1–4)
- **Activity** – degree of physical activity (1–4)
- **Mobility** – ability to change and control body position (1–4)
- **Nutrition** – usual food intake pattern (1–4)
- **Friction and Shear** – amount of assistance needed to move, degree of sliding in bed and/or chair (1–3)

Each of these subscales contains a numerical range, with one being the lowest score possible. The Braden scale score is then derived from totaling the numerical rating from each subscale. The lowest possible total score is 6 and the highest is 23. The lower the score, the higher the risk of developing pressure ulcers. Individuals with scores of 15-18 are considered at-risk of developing pressure ulcers if other major risk factors are present; 13-14, moderate risk; 10-12, high risk, and 9 or below, very high risk.[5]

The Braden scale should always be used in conjunction with nursing judgment. Each subscale score serves as a flag for assessments that need to be explored further, and a guide to the types of interventions that may be required. The lower the subscale scores and total score, the more 'intense' the nursing interventions should become.[6]

Disclaimer:
These are general guidelines. There may be specific pressure ulcer assessment tools used at your healthcare facility which must be followed.

The Braden scale

The cornerstone of pressure ulcer prevention is identifying and minimizing risk factors with the use of a validated risk assessment tool.

Patient's Name _____ Evaluator's Name_____ Date of Assessment

SENSORY PERCEPTION ability to respond meaningfully to pressure-related discomfort	**1. Completely Limited** Unresponsive (does not moan, flinch, or grasp) to painful stimuli, due to diminished level of consciousness or sedation. OR limited ability to feel pain over most of body	**2. Very Limited** Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness OR has a sensory impairment which limits the ability to feel pain or discomfort over ½ of body.	**3. Slightly Limited** Responds to verbal commands, but cannot always communicate discomfort or the need to be turned. OR has some sensory impairment which limits ability to feel pain or discomfort in 1 or 2 extremities.	**4. No Impairment** Responds to verbal commands. Has no sensory deficit which would limit ability to feel or voice pain or discomfort..				
MOISTURE degree to which skin is exposed to moisture	**1. Constantly Moist** Skin is kept moist almost constantly by perspiration, urine, etc. Dampness is detected every time patient is moved or turned.	**2. Very Moist** Skin is often, but not always moist. Linen must be changed at least once a shift.	**3. Occasionally Moist:** Skin is occasionally moist, requiring an extra linen change approximately once a day.	**4. Rarely Moist** Skin is usually dry, linen only requires changing at routine intervals.				
ACTIVITY degree of physical activity	**1. Bedfast** Confined to bed.	**2. Chairfast** Ability to walk severely limited or non-existent. Cannot bear own weight and/or must be assisted into chair or wheelchair.	**3. Walks Occasionally** Walks occasionally during day, but for very short distances, with or without assistance. Spends majority of each shift in bed or chair	**4. Walks Frequently** Walks outside room at least twice a day and inside room at least once every two hours during waking hours				
MOBILITY ability to change and control body position	**1. Completely Immobile** Does not make even slight changes in body or extremity position without assistance	**2. Very Limited** Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.	**3. Slightly Limited** Makes frequent though slight changes in body or extremity position independently.	**4. No Limitation** Makes major and frequent changes in position without assistance.				
NUTRITION <u>usual</u> food intake pattern	**1. Very Poor** Never eats a complete meal. Rarely eats more than ⅓ of any food offered. Eats 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly. Does not take a liquid dietary supplement OR is NPO and/or maintained on clear liquids or IV's for more than 5 days.	**2. Probably Inadequate** Rarely eats a complete meal and generally eats only about ½ of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement. OR receives less than optimum amount of liquid diet or tube feeding	**3. Adequate** Eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products per day. Occasionally will refuse a meal, but will usually take a supplement when offered OR is on a tube feeding or TPN regimen which probably meets most of nutritional needs	**4. Excellent** Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.				
FRICTION & SHEAR	**1. Problem** Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. Spasticity, contractures or agitation leads to almost constant friction	**2. Potential Problem** Moves feebly or requires minimum assistance. During a move skin probably slides to some extent against sheets, chair, restraints or other devices. Maintains relatively good position in chair or bed most of the time but occasionally slides down.	**3. No Apparent Problem** Moves in bed and in chair independently and has sufficient muscle strength to lift up completely during move. Maintains good position in bed or chair.					
				Total Score				

Prevention of pressure ulcers

A person that is bed bound or cannot move due to paralysis, or who has diabetes, vascular disease (circulation problems), incontinence, or mental disabilities, should be frequently checked for pressure ulcers. Special attention should be paid to the areas over a bony prominence where pressure ulcers often form.

Look for reddened areas that, when pressed, do not blanch (turn white), or purple/maroon areas of intact skin. Also look for blisters, ulcers or other open areas.

Interventions[7]

- Schedule regular repositioning and turning for bed and chair-bound patients
- Utilize support surfaces on bed and chairs
- Position with pillows or wedges between bony prominences
- Elevate heels off bed
- Gently cleanse skin at each time of soiling with pH-balanced, non-rinse skin cleanser
- Apply a protective moisture barrier ointment to the affected area
- Manage moisture due to perspiration with wicking, translocating textile with silver[8] (InterDry®Ag)
- Offer active or passive range of motion exercises
- Use lift sheets or lift equipment to reposition or transfer patient
- Maintain head of bed at/or below 30-degrees, if consistent with patient's medical condition
- Refer to dietitian for nutritional assessment and interventions
- Report weight loss, poor appetite or gastrointestinal changes that interfere with eating
- Assist with meals, as needed
- Apply moisturizer to skin at least daily and PRN

International NPUAP-EPUAP pressure ulcer classification system

Category/Stage I:

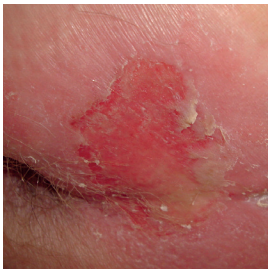
Heel, Stage I

Non-blanchable redness of intact skin
Intact skin with non-blanchable erythema of a localized area usually over a bony prominence. Discoloration of the skin, warmth, edema, hardness or pain may also be present. Darkly pigmented skin may not have visible blanching.

Further description: The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. Category/Stage I may be difficult to detect in individuals with dark skin tones. May indicate 'at-risk' persons.

International NPUAP-EPUAP pressure ulcer classification system

Category/Stage II:



Buttocks, Stage II

Partial thickness skin loss or blister

Partial thickness loss of dermis presenting as a shallow open ulcer with a red-pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled or sero-sanginous filled blister.

Further description: Presents as a shiny or dry shallow ulcer without slough or bruising. This category/stage should not be used to describe skin tears, tape burns, incontinence-associated dermatitis, maceration or excoriation.

International NPUAP-EPUAP pressure ulcer classification system

Category/Stage III:

Ischium, Stage III

Full thickness skin loss (fat visible)

Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Some slough may be present. May include undermining and tunnelling.

Further description: The depth of a Category/Stage III pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have (adipose) subcutaneous tissue and Category/Stage III ulcers can be shallow. In contrast, areas of significant adiposity can develop extremely deep Category/Stage III pressure ulcers. Bone/tendon is not visible or directly palpable.

International NPUAP-EPUAP pressure ulcer classification system

Category/Stage IV:

Coccyx, Stage IV

Full thickness tissue loss (muscle/bone visible)

Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present. Often includes undermining and tunneling.

Further description: The depth of a Category/Stage IV pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have (adipose) subcutaneous tissue and these ulcers can be shallow. Category/Stage IV ulcers can extend into muscle and/or supporting structures (for example, fascia, tendon or joint capsule) making osteomyelitis or osteitis likely to occur. Exposed bone/muscle is visible or directly palpable.

International NPUAP-EPUAP pressure ulcer classification system

Unstageable:

Hip, Unstageable

Full thickness skin loss - depth unknown

Full thickness tissue loss in which actual depth of the ulcer is completely obscured by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed.

Further description: Until enough slough and/or eschar are removed to expose the base of the wound, the true depth cannot be determined; but it will be either a Category/Stage III or IV. Stable (dry, adherent, intact without erythema or fluctuance) eschar on the heels serves as "the body's natural (biological) cover" and should not be removed.

International NPUAP-EPUAP pressure ulcer classification system

Suspected Deep Tissue Injury:

Foot, SDTI

Depth unknown

Purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear.

Further description: The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue. Deep tissue injury may be difficult to detect in individuals with dark skin tones. Evolution may include a thin blister over a dark wound bed. The wound may further evolve and become covered by thin eschar.

Treatment of pressure ulcers

Pressure ulcers treatment goals:

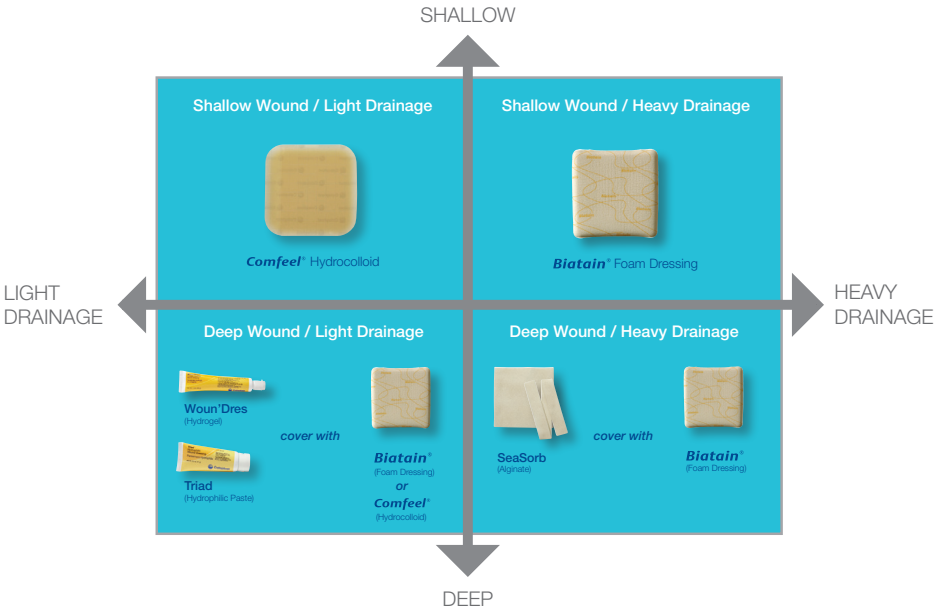
1. Underlying pathology of the pressure ulcer must be treated, if possible. Pressure must be relieved or removed by appropriate measures to prevent further injury.

2. Nutrition is important for healing of pressure ulcer:
   - Provide sufficient calories
   - Provide adequate protein for positive nitrogen balance
   - Provide and encourage adequate daily fluid intake for hydration
   - Provide adequate vitamins and minerals

3. Wound care must be optimized:
   - If there is black or yellow necrotic tissue in the wound, consider debridement to remove the dead tissue
   - If there is a high bacterial load (bioburden) in the wound, consider antimicrobial dressings
   - Cleanse the pressure ulcer and periwound area at each dressing change
   - Use appropriate moist wound healing dressings
     - Dry wound - hydrate it
     - Wet wound - absorb it
     - Shallow wound - cover it
     - Deep wound - fill it / cover it

Disclaimer:
These are only general guidelines. There may be specific pressure ulcer treatment protocols used at your healthcare facility, which must be followed.

Treatment of pressure ulcers

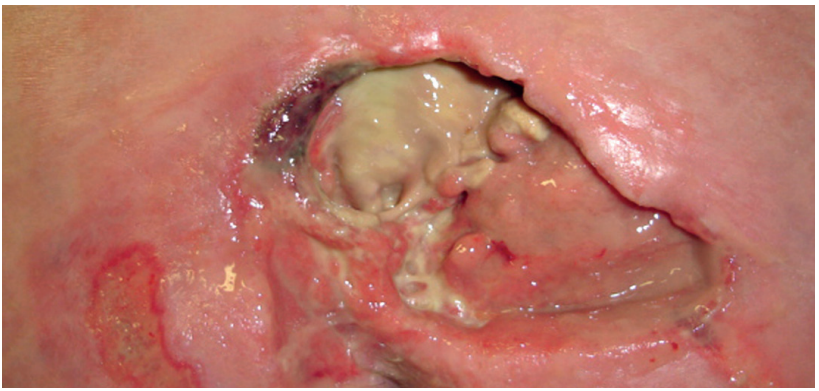


Wound infection

Most types of wounds contain bacteria. Even if the wound is healing normally, a limited amount of bacteria will be present. Bacteria present in a chronic wound such as a pressure ulcer is referred to as contaminated or colonized. But if the bacteria count rises, the wound may become critically colonized or infected. Bacterial overload in a wound can stall or delay healing and can lead to a serious infection. Antibiotic treatment and/or antimicrobial dressings may be required.

Pressure ulcers that are critically colonized or infected may show subtle signs of infection such as:[4]

- Delayed healing
- Change in odor
- Increased serous exudate
- Absent or friable granulation tissue
- New or increased pain



Sacrococcygeal pressure ulcer

Wound infection

If a pressure ulcer is at-risk of infection or has become infected, an antimicrobial silver foam dressing may be helpful. Alternatively, a silver alginate dressing in combination with a foam dressing may be used.

Additional clinical symptoms may arise if the infection spreads to the healthy tissue surrounding the wound. Depending on the type of bacteria, the wound exudate may become more pus-like, and the periwound skin may be tender, red and painful. The patient may also have a fever. If the infection spreads beyond the wound, antibiotics should be used at the discretion of a physician.[7]

Wound debridement

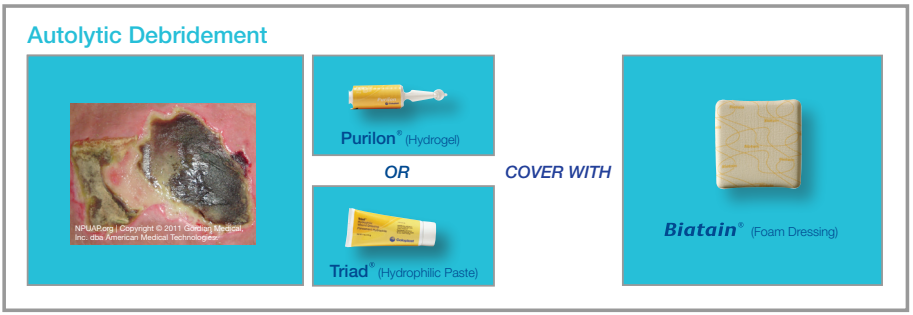
The presence of necrotic or devitalized tissue in a wound promotes the growth of bacteria and prevents wounds from healing. Debridement is the removal of nonviable tissue from a wound and is a naturally occurring part of the wound repair process.[7]

It is important to select a debridement method(s) most appropriate to the person's condition.

- **Surgical** – removal of non-viable tissue by instruments
- **Mechanical** – removal of non-viable tissue by physical forces
- **Enzymatic** - removal of non-viable tissue by proteolytic substances
- **Autolytic** – removal of non-viable tissue by phagocytic cells & proteolytic enzymes

What to debride?

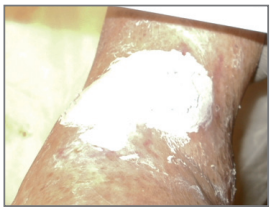
- Slough – moist yellow, tan and/or gray non-viable tissue
- Eschar – black, dry leathery non-viable tissue



Wound debridement

Autolytic debridement is a highly selective, yet natural process, where endogenous proteolytic enzymes break down devitalized tissue.*

Triad™ Hydrophilic Wound Dressing (Zinc oxide-based paste)



Case Study

Day 1

Day 12

Day 21

All wound photos: M Boyle, 2007. Clinical case series: Using a hydrophilic wound dressing for autolytic debridement. © Coloplast.

*Enoch S & Harding K (2003). Wound Bed Preparation: Wound Debridement. Wounds, 15(7): 149-164.

Dressing selection

Wound dressings are a central component of pressure ulcer care. Dressing selection should be based on the type of tissue in the wound bed, the depth of the wound, the amount of wound exudate and the condition of the periwound skin. Suitable wound dressings for pressure ulcers are moist wound healing dressings with good absorption and exudate management properties.

Dressings for deep pressure ulcers

Fill deep, draining wounds with dressing materials, e.g. alginate filler. Document the number of dressings that are used to fill large wounds to ensure all dressings are removed at the next dressing change.

Dressings for infected pressure ulcers

Assess pressure ulcers carefully for signs of infection and delay in wound closure. An antimicrobial moist wound healing dressing, e.g. a silver foam (Biatain® Ag), or a silver alginate dressing (SeaSorb® Soft Ag) in combination with an adhesive secondary dressing (Biatain Silicone) may help prevent or resolve wound infection.

Dressing selection

Pressure ulcers on the sacral area of patients who are incontinent are at higher risk for infection and further skin breakdown. To prevent contamination and protect the wound from urine and/or stool it is important to keep the wound and periwound area clean and use a protective semi-occlusive foam (Biatain®) or hydrocolloid (Comfeel®) dressing. A hydrophilic wound dressing (Triad™) is another alternative for this difficult-to-dress area. The zinc oxide-based paste adheres to moist areas and absorbs moderate amounts of exudate.

Evaluating pressure ulcer progress

A 2-4 week period is recommended for evaluating wound progression[9] toward healing. However, weekly assessments provide an opportunity for the health care professional to detect early complications and the need for changes in the treatment plan.

Treatment needs of a pressure ulcer change over time. Treatment strategies should be continuously re-evaluated based on the current status of the pressure ulcer.

Coloplast solutions for pressure ulcers

Non-infected pressure ulcers

Suitable wound dressings for non-infected pressure ulcers are moist wound healing dressings with superior absorption and exudate management properties.

Biatain® Silicone

- Conforms to the wound bed for superior absorption[10] – even under body pressure
- Soft and flexible dressing with a silicone adhesive for easy removal with minimal damage or irritation to the skin[14]

Biatain / Biatain Adhesive

- Unique 3D polyurethane foam that conforms closely to the wound bed for superior absorption[10] – even under body pressure
- Sacral shape ensures close fit to body and skin for prevention of contamination and leakage

Coloplast solutions for pressure ulcers

Comfeel® Plus

- Comfeel Plus dressings have a unique combination of alginate and hydrocolloid (except the transparent dressing)
- Available in specialty shapes and sizes

Triad™ Hydrophilic Wound Dressing

- Zinc oxide-based paste adheres to wet, eroded skin
- Ideal for difficult-to-dress wounds with light-to-moderate exudate such as those near the gluteal cleft
- May be used to fill deep wounds or cover shallow wounds

Deep Wounds

Deep wounds can be filled with dressing materials, such as an alginate filler and covered with an adhesive dressing.

SeaSorb® Soft

- Highly absorbent alginate dressing for moderate-to-heavy exuding wounds of any size and shape

Coloplast solutions for pressure ulcers

Infected pressure ulcers and pressure ulcers at-risk of infection

Biatain® Ag Adhesive

- Unique 3D polyurethane foam that conforms closely to the wound bed for superior absorption[11] – also under body pressure
- Rapid antimicrobial activity[11]
- Effective against a wide spectrum of bacteria[11,12]
- Available in sacral shape to ensure close fit to body and skin for prevention of contamination and leakage

Biatain Silicone Ag

- Soft and flexible dressing silicone adhesive for easy removal with minimal damage or irritation to the skin[14]
- Rapid antimicrobial activity[11]
- Effective against a wide spectrum of bacteria[11,12]

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Coloplast solutions for pressure ulcers

Infected pressure ulcers

Infected deep pressure ulcers or deep wounds at-risk of infection can be filled with antimicrobial dressing materials, such as an alginate filler, and covered with an adhesive dressing. If the infection spreads beyond the wound, antibiotics should be used at the discretion of a physician.

SeaSorb® Ag

- Highly absorbent antimicrobial alginate dressing for moderate-to-heavy exuding infected wounds or wounds at-risk of infection
- Designed to fight cavity wound infection
- Effective on a broad range of bacteria[15]

Biatain® – The simple choice for superior absorption

Biatain Silicone

Code	Size	Units	HCPCS
3434	3 x 3" (7.5 x 7.5 cm)	10	A6212
3435	4 x 4" (10 x 10 cm)	10	A6212
3436	5 x 5" (12.5 x 12.5 cm)	10	A6212
3437	6 x 6" (15 x 15 cm)	5	A6212
3438	7 x 7" (18 x 18 cm)	5	A6213

Biatain Silicone Lite

Code	Size	Units	HCPCS
3444	3 x 3" (7.5 x 7.5 cm)	10	A6212
3445	4 x 4" (10 x 10 cm)	10	A6212
3446	5 x 5" (12.5 x 12.5 cm)	10	A6212

Biatain Soft-Hold

Code	Size	Units	HCPCS
3473	2 x 2.75" (5 x 7 cm)	5	A6209
3470	4 x 4" (10 x 10 cm)	5	A6209
3475	6 x 6" (15 x 15 cm)	5	A6210

Biatain Non-Adhesive

Code	Size	Units	HCPCS
6105	2 x 2.75" (5 x 7 cm)	10	A6209
3410	4 x 4" (10 x 10 cm)	10	A6209
3413	6 x 6" (15 x 15 cm)	5	A6210
3416	8 x 8" (20 x 20 cm)	5	A6211

Biatain Adhesive

Code	Size	Units	HCPCS
3430	4 x 4" (10 x 10 cm)	10	A6212
3420	5 x 5" (12.5 x 12.5 cm)	10	A6212
3423	7 x 7" (18 x 18 cm)	5	A6213
Sacral			
3485	9 x 9" (23 x 23 cm)	5	A6213
Heel			
3488	7.5 x 8" (19 x 20 cm)	5	A6212

Biatain Silicone Ag

Code	Size	Units	HCPCS
9636	3 x 3" (7.5 x 7.5 cm)	10	A6212
9637	4 x 4" (10 x 10 cm)	10	A6212
9638	5 x 5" (12.5 x 12.5 cm)	10	A6212

Biatain Ag Non-Adhesive

Code	Size	Units	HCPCS
9622	4 x 4" (10 x 10 cm)	5	A6209
9625	6 x 6" (15 x 15 cm)	5	A6210

Biatain Ag Adhesive

Code	Size	Units	HCPCS
9632	5 x 5" (12.5 x 12.5 cm)	5	A6212
9635	7 x 7" (18 x 18 cm)	5	A6213
Sacral			
9641	9 x 9" (23 x 23 cm)	5	A6213
Heel			
9643	7.5 x 8" (19 x 20 cm)	5	A6212

Other Coloplast products for pressure ulcers

SeaSorb® Soft

Code	Size	Units	HCPCS
3705	2 x 2" (5 x 5 cm)	30	A6196
3710	4 x 4" (10 x 10 cm)	10	A6196
3715	6 x 6" (15 x 15 cm)	10	A6197

SeaSorb Soft Ag

Code	Size	Units	HCPCS
3755	2 x 2" (5 x 5 cm)	30	A6196
3760	4 x 4" (10 x 10 cm)	10	A6196
3765	6 x 6" (15 x 15 cm)	10	A6197

SeaSorb Soft Alginate Filler

Code	Size	Units	HCPCS
3740	1 x 17.5" rope (44 cm)	6	A6199

SeaSorb Soft Ag Alginate Filler

Code	Size	Units	HCPCS
3780	1 x 17.5" rope (44 cm)	10	A6199

Other Coloplast products for pressure ulcers

Comfeel® Plus (Thin)

Code	Size	Units	HCPCS
3530	2 x 2.75" (5 x 7 cm)	10	A6234
3533	4 x 4" (10 x 10 cm)	10	A6234
3536	3.5" x 5.5" (9 x 14 cm)	10	A6235
3539	6 x 6" (15 x 15 cm)	5	A6235

Comfeel Plus Ulcer

Code	Size	Units	HCPCS
3146	1.5" x 2.5" (4 x 6 cm)	30	A6234
3110	4 x 4" (10 x 10 cm)	10	A6234
3115	6 x 6" (15 x 15 cm)	10	A6235
3120	8 x 8" (20 x 20 cm)	5	A6236

Comfeel Plus Contour

Code	Size	Units	HCPCS
3280	24 sq. in. (6 x 8 cm)	5	A6235
3283	42 sq. in. (9 x 11 cm)	5	A6235

Comfeel Plus Sacral

Code	Size	Units	HCPCS
3285	7 x 8" (18 x 20 cm)	5	A6239

Comfeel Plus Pressure Relief

Code	Size	Units	HCPCS
3350	3" Butterfly (7 cm)	5	A6237
3353	4" Round (10 cm)	5	A6237
3356	6" Round (15 cm)	5	A6238

Comfeel Ulcer Care

Code	Size	Units	HCPCS
3233	1.5" x 2.5" (4 x 6 cm)	30	A6234
3213	4 x 4" (10 x 10 cm)	10	A6234
3218	6 x 6" (15 x 15 cm)	5	A6235

Other Coloplast products for pressure ulcers

Sea-Clens® Wound Cleanser

Code	Size	Units	HCPCS
1063	6 fl. oz./178 mL	12	A6260
1061	12 fl. oz./355 mL	12	A6260

Triad™ Hydrophilic Paste

Code	Size	Units	HCPCS
1964	2.5 fl. oz./71 g	12	A6240
1967	6 oz./170 g	12	A6240

Purilon® Gel

Code	Size	Units	HCPCS
3906	.28 oz/8g	10	A6248
3900	.5 oz/15g	10	A6248
3903	.88 oz/25g	10	A6248

Woun'Dres® Collagen Hydrogel

Code	Size	Units	HCPCS
1166	1 oz./28 g tube	36	A6248
7690	3 oz./84 g tube	12	A6248

References

1. Preventing Pressure Ulcers in Hospitals: A Toolkit for Improving Quality of Care. AHRQ Publication No. 11-0053-EF, April 2011. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/research/ltc/pressureulcertoolkit/

2. National Pressure Ulcer Advisory Panel and European Pressure Ulcer Advisory Panel. Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline. Washington, DC: National Pressure Ulcer Advisory Panel; 2009.

3. Vanderwee K, et al. Pressure ulcer prevalence in Europe: a pilot study. Journal of Evaluation in Clinical Practice. 2007:13(2):227–235.

4. Wound, Ostomy and Continence Nurses Society. Guideline for Prevention and Management of Pressure Ulcers. Mt Laurel, NJ: Wound, Ostomy and Continence Nurses Society; 2010.

5. Ayello E, Braden B. How and why to do pressure ulcer risk assessment. Advances in Skin & Wound Care. 2002:15(3):125-131.

6. Braden B. The Braden scale for predicting pressure sork risk: reflections of 25 years. Advances in Skin & Wound Care. 2012:25(2):61.

7. Bryant RA, Nix DP, eds. Acute and Chronic Wounds: Current Management Concepts. 4th ed. St Louis, MO: Elsevier Mosby; 2012.

8. Black J, et al. MASD part 2: incontinence-associated dermatitis and intertriginous dermatitis - a consensus. Journal of Wound, Ostomy, Continence Nursing. 2011:38(4):359-370.

9. Krasner DL, Rodeheaver G, Sibbald RG, eds. Chronic Wound Care: A Clinical Source Book for Healthcare Professionals. 4th ed. Malvern, PA: HMP Communications; 2007.

10. Anderson K, et al. A randomized, controlled study to compare the effectiveness of two foam dressings in the management of lower leg ulcers. OWM. 2002:48(8):34-41.

11. Münter KC, et al. Effect of a sustained silver releasing dressing on ulcers with delayed healing: The CONTOP study. Journal of Wound Care. 2006;15:199-206.

12. Ip M, et al. Antimicrobial activities of silver dressings: an in vitro comparison. Journal of Medical Microbiology. January 2006:55:59-63.

13. Basterzi Y, et al. In-vitro comparison of antimicrobial efficacy of various wound dressing materials. Wounds. 2010:22(7):165–170.

14. Cooper P. Biatain Silicone: an atraumatic foam dressing for local exudate management. Wounds UK. 2010:6(4):168-72.

15. Independent laboratory testing provided by Wickham Laboratories.

Notes

After 30 years in wound care, we at Coloplast believe that absorption is the key to better healing. Our Biatain® portfolio brings superior absorption to daily wound care needs, making Biatain the simple choice for faster healing.

Ostomy Care
Urology & Continence
Wound & Skin Care

Coloplast

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, urology and continence care and wound and skin care. We operate globally and employ more than 7,000 people.

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