

Closing the Gap in Dressing Selection in the Acute Care Setting

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Faculty Disclosures

- **Karen Bauer, DNP, CNP-FNP, FAAWC, CWS**
Advisory Board: Solventum, Medical Surgical Business; Urgo Medical NA;
Consultant: Solventum, Medical Surgical Business; Urgo Medical NA;
MiMedx; Speakers Bureau: Solventum, Medical Surgical Business; Urgo
Medical NA; MiMedx
- **Tabitha Beck, MSN, FNP-BC, CWS** has nothing to disclose in relation
to this activity
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Learning Objectives

- Examine challenges in acute wound care management related to reliance on wound fillers, including care complexity, delays in specialty wound consultation and treatment initiation, risks of improper filling, and increased nursing time and resource use
- Explain the importance of wound dressing selection in the acute care setting, emphasizing dressing conformity to the wound bed, effective exudate management, and maintenance of a moist healing environment
- Assess how the clinical features of a novel silicone foam dressing, including lift-and-reapply capability, can improve care efficiency, standardization, and continuity of wound assessment in the acute care setting
- Navigate illustrative case studies utilizing a novel silicone dressing for the management of a variety of wounds with depth in the acute care setting

Q&A

Submit questions at any time
via the question box

Challenges of Fillers in Acute Wound Care Management

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What's the Deal with Depth?

- Depth adds complexity
- Increased risk of complications like infection
- Alters treatment plan
- A poll of wound care clinicians found that 60% of respondents report wounds of depth should be packed

Why Fillers?

- Common practice
- Manage dead space
- Absorb exudate
- Prevent premature closure
- Support moist wound healing

Key Challenges of Filler-Dependent Care



INCREASED CARE
COMPLEXITY



DELAYS IN SPECIALTY
WOUND CONSULTATION



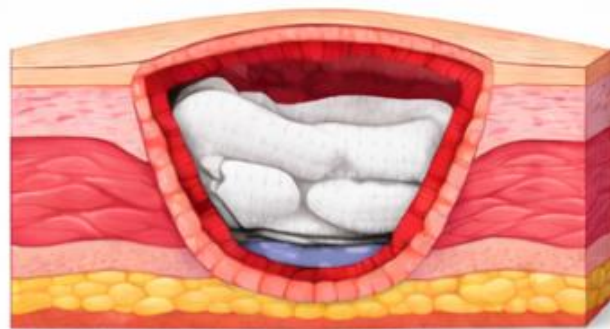
CLINICAL RISKS FROM
IMPROPER FILLING



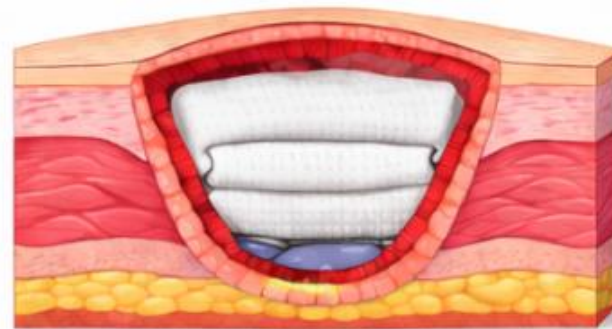
OPERATIONAL AND
NURSING WORKLOAD
BURDEN

Challenge 1: Increased Care Complexity

- Packing adds variability to care
 - Packing technique varies by clinician
 - Risk of over- or under-filling wound
 - Frequent dressing changes
 - Difficult to standardize practice



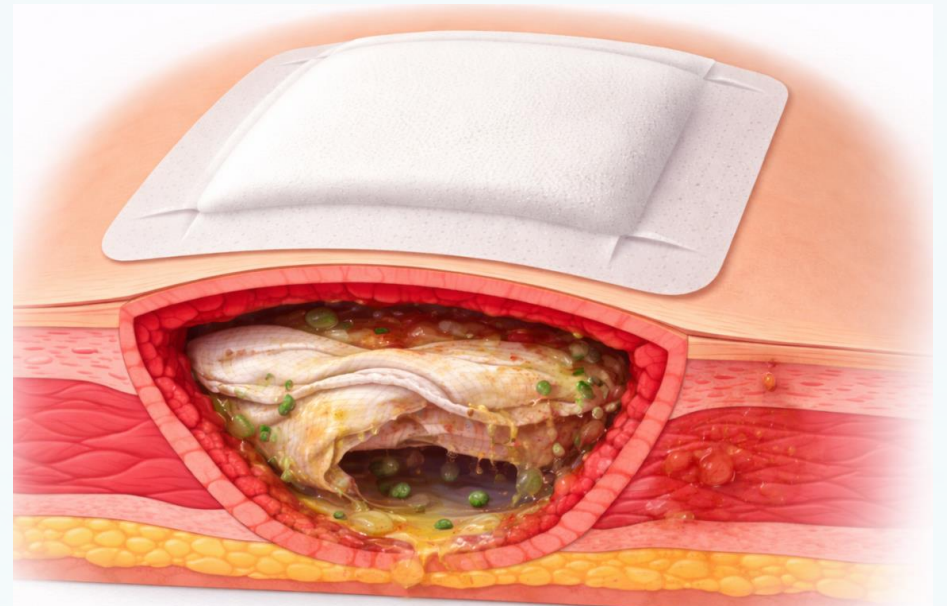
Nurse A: Loosely Packed



Nurse B: Tightly Packed

Challenge 2: Delays in Specialty Escalation

- Packing can create the illusion of “active treatment”
 - Perception that the wound is being managed
 - No clear trigger for specialty consultation
 - Delays in escalation
 - Underlying drivers of wound may remain unaddressed



Challenge 3: Clinical Risk

- Tissue ischemia from overpacking
- Abscess formation from under-packing
- Retained packing material
- Trauma and pain at removal
 - A large international survey found that 40% of patients report dressing change pain as the worst part of living with a wound

Challenge 4: Operational Risk

- Increased nursing time
- Supply cost accumulation
- Workflow inefficiency
- Greater opportunity for error



Clinical Pearls

- Fillers are valuable tools, but should not be the plan
- Reliance of fillers introduces challenges
- Variability is inevitable
- Complexity amplifies risk
- Simplicity supports safer wound care

Dressing Selection: Acute Care Setting

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Chief Nursing Officer, Clara Healthcare
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Dressing Selection Guide

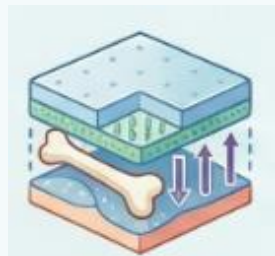
Prevention vs Treatment in Acute Care

Choosing the “ideal” dressing requires matching a dressing’s function to a specific clinical goal. Selection is based on a holistic assessment of the patient’s condition, the tissue type, and whether the primary objective is to protect intact skin or facilitate healing.



Prevention

Pressure Injuries
and Medical Devices



Prophylactic buffering for high-risk areas

Use multilayered soft silicone foam dressings to redistribute vertical pressure, shear, and friction



Shielding against medical devices (MDRPI)

Apply prophylactic dressings beneath therapeutic devices to minimize tissue damage at the skin/device interface



Microclimate control

Select breathable dressings to prevent excess moisture and maintain the skin’s natural barrier function

MDRPI = medical device-related pressure injury.



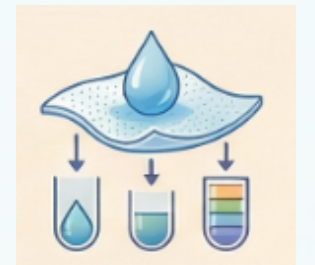
Treatment

Wound Management
and Healing



Dynamic exudate management

Match dressing capacity (eg, alginates, superabsorbents) to drainage levels to prevent maceration



Maintaining the moist environment

Utilize hydrogels or foams to promote autolytic debridement and faster cell migration



Anatomical conformability

Select flexible dressings that adapt to body contours and fill “dead space” in deep wounds



Traditional Selection Guide For Topical Wound Treatments and Dressings

Shallow Wound Minimal Drainage

- Hydrating gels and cover with foam dressing
- Bordered silicone foam dressing

Shallow Wound Heavy Drainage

- Place alginate and cover with foam dressing
- Bordered silicone foam dressing

Deep Wound Minimal Drainage

- Fill depth by loosely packing alginate and cover with foam dressing
- Bordered silicone foam dressing for wounds less than 2cm depth

Deep Wound Heavy Drainage

- Fill depth by loosely packing hydrofiber and cover with foam dressing
- Bordered silicone foam dressing for wounds less than 2cm depth

VIPES Study

- Study evaluated both chronic and acute wounds
- Looking at a real-world experience
- The VIPES results highlight that **novel foam supported the healing of complex wounds by effectively managing the dead space between the dressing and the wound bed**

73% saw improvement

43% of wounds healed

89% had healthy periwound tissue

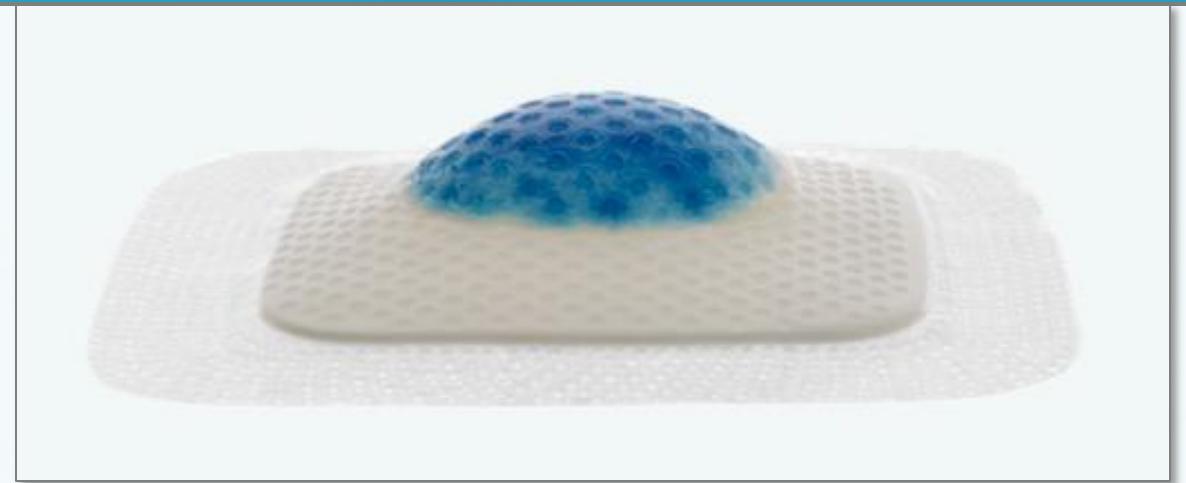
Overview of the Novel Foam

Bordered silicone foam dressing for pressure injury (PI) prevention **and** wound treatment

- Matches shape, depth of wound bed up to 2cm deep
- Vapor-permeable top film is bacteria and waterproof
 - Tissue layer
 - Super absorber
 - Absorbent polyurethane foam
 - Perforated silicone adhesive
- Indications
 - Low- to highly-exuding wounds
 - Prevention of postoperative blistering
 - Prophylactic therapy to prevent PIs, skin damage



Pre-Clinical Evidence



- Key parameters measured
 - Pressure redistribution
 - Static and dynamic friction
 - Peel adhesion
 - Waterproof
- Wound treatment key parameters
 - Fluid handling
 - Retention
 - Relative swelling rise

Nursing and Wound Care

Current Wound Care Statistics

- Up to 2/3 of community nursing time is spent providing wound care and management, mainly from delayed healing in chronic wounds
- Global surveys of nurses found that a dressing change occurs once every 3 days if the wound is infected, and, at most, every 6 days in non-infected wounds, regardless of the wound etiology
- A 2018 survey of patients with wounds, across 15 countries, revealed that 40% of patients say **pain at dressing change was the worst part of living with a wound**

Nursing and Wound Care Solution

- Foam dressings are an effective tool for
 - Warm, moist wound healing
 - Managing exuding wounds
 - Minimizing dressing discomfort and pain for patient care
- What makes a silicone foam dressing stand out?
- How can we decrease the time burden on nursing staff?

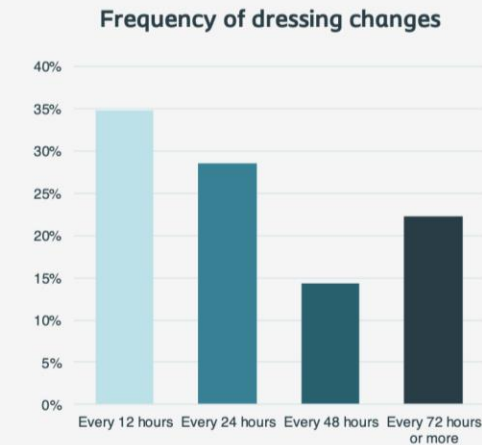
Static Friction Coefficient in Foam Dressings

Nurses were asked: How frequently do you change your current dressing used for PI prevention?

Nurses across the country (N=112) reported:

64% of nurses change the dressing at least every 24hrs

35% of nurses change the dressing at least every 12hrs



1. Data on file. Coloplast staff facilitated conversations with 115 nurses in acute care. Interpretations of their conversations were captured through a survey and quantified. August 2024 – September 2024.

RN Complaint 1:

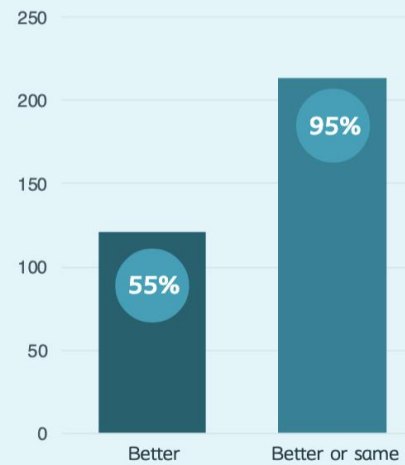
- *Foam dressings bunch and need to be changed too frequently*
- Dressing changes caused considerable pain in 74% of patients surveyed

Will Bordered Silicone Foam Stay in Place?

55% of nurses (120/218) said bordered silicone foam stayed in place better over time than their current dressing

A dressing staying in place better over time may lead to a potential reduction in dressing changes.

Ability for dressing to stay in place



1. Data on file. Biatain Silicone Fit evaluation forms completed in February – August 2024. For illustrative purposes only. This information is not intended to constitute medical or business advice or in any way replace the independent medical judgment of a trained and licensed physician with respect to any patient needs or circumstances and may not be representative of all patient outcomes. Actual amounts, performance, outcomes, and experience may vary. Prior to use, refer to product labeling for complete product instructions for use, contraindications, warnings and precautions.

Peel Adhesion Force in Foam Dressings

Nurses were asked: How often are you able to lift and reapply your current dressing without compromising its effectiveness?

Nurses across the country (N=97) reported:

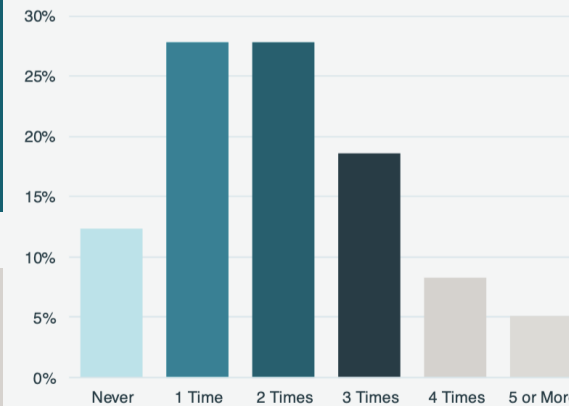


68% of nurses are only able to lift and reapply 2 times or fewer



13% of nurses were able to lift and reapply 4 or more times

Ability to lift and reapply dressing



1. Data on file. Coloplast staff facilitated conversations with 115 nurses in acute care. Interpretations of their conversations were captured through a survey and quantified. August 2024 – September 2024.

RN Complaint 2:

- *Foam dressings do not stick after skin reassessment*

An upgraded silicone allows the bordered silicone foam dressing to be applied and reapplied 5 times over 3 days, helping to reduce waste.

60% of nurses (137/229) rated bordered silicone foam as easy to lift and reapply

A product that is easy to lift and reapply may increase the wear time and lead to a potential reduction in dressing changes.



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Silicone Foam Dressing Conclusions In Acute Nursing Care

- Effective for warm, moist wound healing, manage exuding wounds, and minimizing dressing discomfort and pain for patient care
- Prevents unnecessary dressing changes due to its increased ability to stay in place, which also decreases pain from dressing changes
- Nurses report that can be lifted and reapplied (up to 5 times in a 3-day wear time)
- May be used for different types of wound and will fill a wound depth up to 2cm preventing the need for filler dressings and “prevent a plop” of dressings when reassessed during daily skin care
- Absorbs vertically and seal drainage decreasing maceration and preventing additional barrier creams and films need for periwound protection

Impact of Advanced Silicone Foam Features on Care Efficiency and Consistent Wound Assessment in the Acute Care Setting

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Modern Foam... Almost Universal

- Soft, atraumatic silicone adhesive layer
- Absorbent foam core for exudate management
- Vapor-permeable backing to maintain moisture balance
- Flexible construction for anatomical conformity
- Designed for repeated lifting and repositioning without losing adhesion



Foam Functions

- Foam core absorbs and retains exudate to prevent maceration
- Breathable backing maintains optimal moisture vapor transmission
- Suitable for low- to high-exudate wounds depending on product thickness
- Helps maintain a stable healing environment between assessments

Patient Selection

- Pressure injuries
- Diabetic foot ulcers
- Venous leg ulcers
- Traumatic wounds
- Postoperative incisions
- Skin tears and fragile-skin injuries





Reduce Burden on Nursing Workflow

- Lift-and-reapply feature reduces unnecessary dressing changes
- Extended wear time supports **predictable scheduling**
- Decreases supply use and waste
- Streamlines wound rounds and multidisciplinary assessments
- Supports indirect supervision workflows by enabling **clear, consistent visualization** when nurses report changes
- Supports **vascular monitoring** (eg, pedal pulses, perfusion changes)
- Reduces dressing waste when multiple providers assess the same wound

Take a Number, Charge a Dime

- Enhancing Assessment without Compromising Adhesion
- Minimizes skin trauma by avoiding repeated full removal
- Maintains secure seal after repositioning
- Ideal for settings requiring **serial assessments** (ABI/TBI follow-up, edema monitoring, infection surveillance)



Patients First

- Soft silicone minimizes epidermal stripping
- Gentle removal reduces pain and anxiety
- Suitable for fragile, aging, or compromised skin
- Helps maintain periwound integrity — critical for healing trajectories

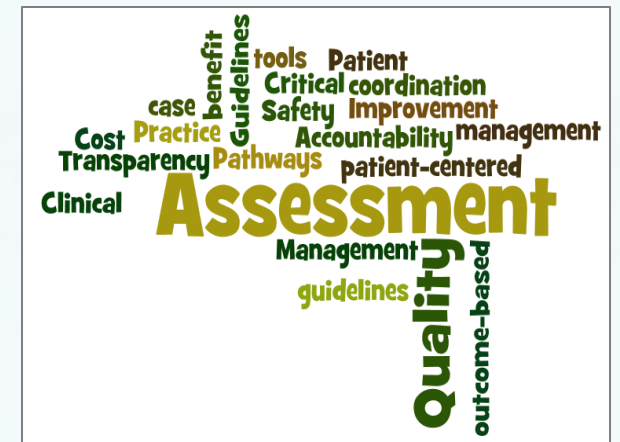
Efficiency in Workflow

- Minimizes dressing changes during off-hours and weekends
- Reduces supply use and time spent on dressing reapplication
- Supports **predictable wear time**, easing workload for wound care consults and bedside nurses
 - Aligns with inpatient goals: **Reduce interruptions, streamline documentation, and support continuity**

Quality Care

CMS: The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge

It is fundamentally based on delivering safe, effective, patient-centered, timely, efficient, and equitable care



Standardization: Foam Dressings

- Consistent handling across units (ICU, med-surg, step-down)
- Easy to teach and reinforce among rotating staff
- Supports protocolized wound pathways (eg, pressure injury bundles)
- Reduces variation in dressing technique and documentation

Reliability and Predictability

- **Reliable performance, predictable outcomes**
- Consistent adhesion and handling characteristics across the foam line
- Standardized application steps reduce variation between providers
- Supports protocolized wound pathways (venous, diabetic foot, pressure injuries)
- Facilitates education for new staff and cross-coverage teams
- Aligns with systemwide initiatives for **uniform documentation and care delivery**

Simplification

- Simplifies clinical decision-making
- Supports accurate tracking of
 - Exudate volume and character
 - Tissue quality and granulation
 - Signs of deterioration (ischemia, infection, maceration)



Research

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ORIGINAL ARTICLE

IWJ WILEY

Clinical performance and cost-effectiveness of a Silicone foam with 3DFit™ technology in chronic wounds compared with standard of care: An open randomised multicentre investigation

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Funding information

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Abstract

The objective of the study was to show the clinical performance and cost-effectiveness of a Silicone foam dressing with 3DFit™ Technology compared to current standard of care. This was an open-labelled, two-arm, randomised controlled multicentre study conducted from February to December 2023. One hundred and two participants with an exuding, non-infected and chronic ulcer were randomised in a 1:1 fashion and treated with either a Silicone foam with 3DFit™ Technology or standard of care (a filler combined with a secondary dressing), stratified by venous leg ulcers and diabetic foot ulcers. After a 4-week study period, wound size and total costs were evaluated. After 4 weeks of treatment, a comparable percentage in wound area reduction was observed

- 4 wks: Comparable wound area reduction in both treatment arms with mean and 95% confidence interval of 54.3% (37.1%; 71.5%) and 43.0% (26.5%; 59.6%) for the investigational and comparator dressing, respectively
- Mean estimated costs significantly lower for investigational dressing (£14.3, 95% confidence interval [£9.6; £19.0]) compared to the 2-dressing regime (£21.4 [£16.9; £26.0])= 33% price reduction ($p=0.033$)
- RCT: 3DFit™ (conforming silicone foam dressing technology) is a cost-effective alternative to using a filler and a secondary dressing at a significantly lower cost
- VLU, DFU up to 2cm depth

Standard Foams

- Conforms to ulcer bed
- Can be used under compression
- 3D foam structure absorbs vertically
- Lock-away layer locks away the fluid, wound stays moist
- Low risk of maceration



Other Versions

- Matches the shape and depth of the wound bed up to 2cm deep
- Can be applied, lifted, and reapplied at least 5 times over 3 days
- Many shapes and sizes



Thin Foam

- Non- to low-exuding wounds
- Can be used in combination with compression therapy
- Conforms to the wound bed
- Good for increased mobility needs
- Semi-permeable
- Vertical absorption



Clinical Pearls:

Modern Silicone Foams Elevate Wound Care

- Lift-and-reapply capability supports **continuous assessment**
- Atraumatic silicone promotes **skin protection and patient comfort**
- Standardized handling improves **workflow efficiency**
- Predictable performance enhances **team communication and documentation**
- Aligns with limb preservation priorities
 - Early detection
 - Rapid response
 - Consistent care

Case Study

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Wound History and Management

- 63y Male, PMH: CAD, T2DM (poorly controlled), schizoaffective disorder bipolar, venous stasis ulcer; hospitalized for sepsis related to LLE wound infection; patient reported wounds present x2 mos and had been treating at home with bleach



Wound History and Management

- 63y Male, PMH: CAD, T2DM (poorly controlled), schizoaffective disorder bipolar, venous stasis ulcer; hospitalized for sepsis related to LLE wound infection; patient reported wounds present x2 mos and had been treating at home with bleach
 - Wound type: Venous stasis ulcer
 - Age of wound: 12 wks (in treatment)



Wound History and Management

- 63y Male, PMH: CAD, T2DM (poorly controlled), schizoaffective disorder bipolar, venous stasis ulcer; hospitalized for sepsis related to LLE wound infection; patient reported wounds present x2 mos and had been treating at home with bleach
 - Previous treatment: Arterial ultrasound showed triphasic flow; NEG DVT or stenosis; cultures obtained, Infectious Disease consulted, pt treated with IV ABX; wound treated with enzymatic debridement x8 wks and mechanical debridement due to pain; compression therapy with 2-layer wraps



Wound History and Management

- 63y Male, PMH: CAD, T2DM (poorly controlled), schizoaffective disorder bipolar, venous stasis ulcer; hospitalized for sepsis related to LLE wound infection; patient reported wounds present x2 mos and had been treating at home with bleach
 - Wound characteristics: Wound bed is necrotic with adherent slough, wound edges inflamed, heavily exudative, periwound skin is excoriated edematous, erythematous; will not tolerate sharp debridement due to pain



8 wks of treatment using only SOC prior to case study (Enzymatic debridement, compression therapy)



Bordered Silicone Foam AWD Application

- Size and product applied: Biatain® Silicone Fit (bordered silicone foam) 6x6in
- Wound measurement: 11.20x15.00x0.2cm
- Debrided: Selective, sharp debridement with lidocaine 2%; silver nitrate to hypergranular areas
- Brief description: Patient wound is stable, no acute/active infection, areas of hypergranulation, wound bed is beefy red with some yellow areas of adherent slough, wound edges have some early epithelialization present, periwound tissue is healthy, pink, shiny, no areas of maceration, induration, or erythema; pain 3/10



Bordered Silicone Foam AWD Application

- Wound treatments: Wound bed is prepped with selective, sharp debridement, silver nitrate is applied to hypergranular areas. The wound bed is covered with a layer of gentamicin ointment. Wounds are covered with bordered silicone foam 6x6 (x2); lower extremity is compressed with 2-layer compression system



Bordered Silicone Foam AWD Application

- Size and product applied: Bordered silicone foam 6x6in (x2); 4x4in (x2)
- Wound measurement: 11.2x15x0.2cm
- Debrided: Selective, sharp debridement with lidocaine 2%
- Brief description: Patient wound is stable, no acute/active infection, areas of hypergranulation are present, wound bed is beefy red with some yellow areas of adherent slough, wound edges have some early epithelialization present, periwound tissue is healthy, pink, shiny, no areas of maceration, induration, or erythema; pain 0/10



Bordered Silicone Foam AWD Application

- Wound treatments: Wound bed is prepped with selective, sharp debridement. The wound bed is covered with a layer of gentamicin ointment. Wounds are covered with bordered silicone foam 6x6in (x3) and 4x4in (x1). Leg is compressed with 2-layer compression system



Bordered Silicone Foam AWD Application

- Size and product applied: Bordered silicone foam 6x6in (x3); 4x4in (x1)
- Wound measurement: 12x15x0.2cm
- Debrided: Selective, sharp debridement with lidocaine 2%; silver nitrate to hypergranular areas
- Brief description: Patient wound is stable, no acute/active infection, areas of hypergranulation are present, wound bed is beefy red with some yellow areas of adherent slough, wound edges have some early epithelialization present, periwound tissue is healthy, pink, shiny, no areas of maceration, induration, or erythema; pain 0/10



Bordered Silicone Foam AWD Application

- Wound treatments: Wound bed is prepped with selective, sharp debridement. The wound bed is covered with a layer of gentamicin ointment. Wounds are covered with bordered silicone foam 6x6in (x3); lower extremity is compressed with 2-layer compression system



Bordered Silicone Foam AWD Application

- Size and product applied: Bordered silicone foam 6x6in (x3)
- Wound measurement: 11.5x15.3x0.2cm
- Debrided: Selective, sharp debridement with lidocaine 2%
- Brief description: Patient wound is stable, no acute/active infection, areas of hypergranulation are present, wound bed is beefy red with some yellow areas of adherent slough, wound edges have some early epithelialization present, periwound tissue is healthy, pink, shiny, no areas of maceration, induration, or erythema; pain 0/10



Bordered Silicone Foam AWD Application

- Wound treatments: Wound bed is prepped with selective, sharp debridement. The wound bed is covered with a layer of gentamicin ointment. Wounds are covered with bordered silicone foam 6x6in (x3); lower extremity is compressed with 2-layer compression system



Bordered Silicone Foam AWD Application

- Total number of bordered silicone foam AWD applications: 3



- Treatment outcome: At the conclusion of the case study, the bordered silicone foam dressings demonstrated superior absorptive ability. Use of the dressings, under a 2-layer compression system, for a full 7 days had a post weight of 2.9 oz of fluid. This fluid was successfully held away from the wound and periwound skin as evidenced by no maceration or periwound excoriation or edema. This is without barrier creams or other hydrophilic products. Each wound was treated in clinic with selective debridement and silver nitrate to hypergranular areas. While there was only mild reduction of wound size over the 3-wk study, the wound integrity was improved through maintaining adequate moisture balance. Patient reported comfort through the entire study and denied any pain with bandage removal or irritation under the dressing throughout wear.



Bordered Silicone Foam Comparison



Absorptive Performance of Bordered Silicone Foam



Dry weight: 1.9 oz



Post application: 4.8 oz

That's a difference of 2.9 oz, which translates to **just over 1/3 cup*** of exudate

*2.6666 oz = 1/3 cup

Hope through Healing



Questions?

Thank you