

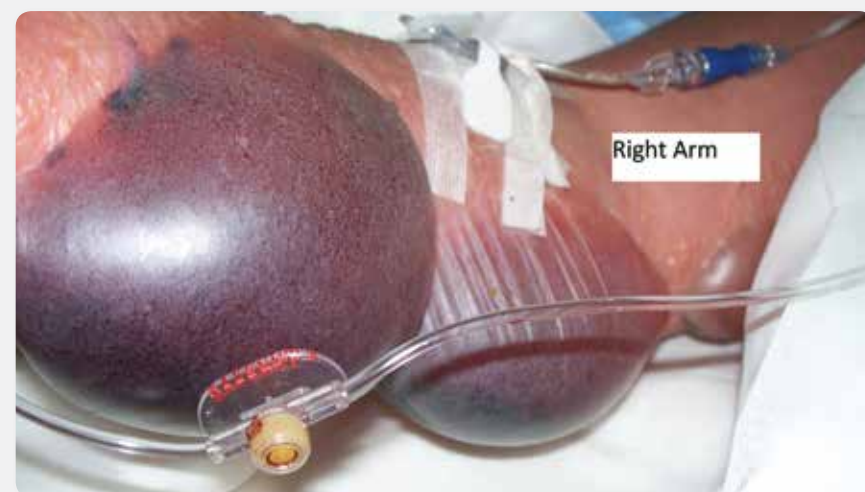
## Introduction

A 17 y/o Caucasian female was admitted to Critical Care with a diagnosis of relapsed B-cell acute lymphoid leukemia (ALL), pancytopenia, and immunosuppression who had been hospitalized for 2 months at the time of her erythroderma reaction to a chemotherapy regimen.

## Problem:

This young woman began developing painful bullous lesions to her lower extremities and was transferred to PICU for symptoms of evolving instability.

Over the next 24 hours, the bullous lesions spread to all extremities and became filled with blood and serous fluid as a side effect of chemotherapy; ultimately these involved an estimated 25-30% TBSA with large areas of dermal surface exposed when the lesions ruptured.



Over the next 4-5 days there was involvement of the abdomen and back, but the worst lesions were on the extremities.

Due to severe pain, a wound care regimen that would require dressing changes only every few days with minimal manipulation of the patient's extremities was vital.

Risk of overwhelming sepsis from open wounds in the presence of profound neutropenia was an equal concern.

## Proposal

A multi-disciplinary team was assembled to discuss the "big picture" and determine the best approach for wound care. Multiple modalities of skin care were analyzed: creams, impregnated gauze, and silver sulfadiazine. All of these were ultimately determined to be less than optimal treatment plans compared to the benefits provided by an antimicrobial exudate transfer foam.

The Certified Wound and Ostomy Nurse recommended use of an absorbent soft silicone antimicrobial exudate transfer foam\*. Advantages of this product included transfer of wound exudate away from wounds into secondary dressings, antimicrobial activity for up to 14 days, with no need to remove primary dressing until that time. Additional benefits included:

- Ease of application and removal: gently adherent but non-injurious to friable wound beds upon removal
- Dressing changes were required every few days instead of multiple times per day
- Lowest degree of discomfort with dressing changes compared to other options.
- Sustained antimicrobial effect for all wound areas
- Adequate product size available to meet needs of large areas of tissue loss (8" x 20" sheets)
- Could be helpful in maintaining body temperature while preventing maceration of underlying tissue

## Left leg



Day 1



Day 4



Discontinued on Day 14,  
photo taken 4 days later

## Right leg



Day 1



Day 4



Discontinued on Day 14,  
photo taken 4 days later

## Method

Large sheets of absorbent soft silicone antimicrobial exudate transfer foam were used to wrap the entirety of body areas involved. These 8" x 20" sheets uniquely provided an atraumatic adherence over all wound areas to prevent further damage when the product was ready for removal. This product absorbed and "transferred" the bullae effluent through the dressing where it could be contained by a layer of large absorbent gauze pads.

The absorbent soft silicone antimicrobial exudate transfer foam remained in place over the wound beds, maintained moisture for wound healing, and wicked excess effluent through the dressing where replaceable absorbent dressings were able to contain the drainage.

The patient did require use of a forced-air warming unit in the initial 3-4 days of treatment to help maintain her body temperature despite all extremity wounds being covered with occlusive dressings.

## Results

Within 15 days of initiating treatment with the absorbent soft silicone antimicrobial exudate transfer foam, and three dressing changes, the patient had completely reepithelialized all bullous areas and no further wound care was needed. This was accomplished despite acute renal and respiratory failure, pancytopenia/acute lymphocytic leukemia relapse, vasopressor therapy for low blood pressure, and a coagulopathy that created other challenges in this patient's care.

## Discussion

During the time the patient was in the ICU with multiple invasive lines, she did not suffer any hospital acquired infection.

Challenges encountered including having to suture the PICC line in place when sloughing of the entire surrounding epidermal layer ensued. With use of the absorbent soft silicone antimicrobial exudate transfer foam over the insertion site occlusively, the line did not require replacement for the entirety of the patient's ICU stay.

## Conclusion

The absorbent soft silicone antimicrobial exudate transfer foam afforded the patient an effective, efficient, and comfort-centered approach to care. The dressing met the patient's unique wound care requirements and expedited wound healing.

This dressing proved that it could handle large volumes of effluent and negated the need to remove the base dressing frequently, allowing dressings to be replaced every few days instead of every few hours.

Wound care was accomplished with minimal disruption of patient care for this critically ill patient.