INTRODUCTION: Bioburden in a wound is a major concern for clinicians, causing challenges for the patient, painful dressing removal, delayed wound healing and overall increase in cost of treatment. Promotion of healing through reduction of bacterial burden is a primary goal in wound management and can often be accomplished through the selection of antimicrobial dressings. Secondary management goals are exudate control and the reduction of trauma and pain for the patient. Financial considerations are paramount for the home care setting due to clinician shortages and the cost of managing chronic wounds. To address the challenges that increased wound bioburden places on both the patient and the home health agency, Middlesex Hospital Home Care choose to evaluate an antimicrobial soft silicone foam dressing, Mepilex® Ag with Safetac® technology. Evaluation guidelines for dressing effectiveness were developed and 3 patients were selected. Our goals for this evaluation were to identify if the dressing would:

• Support evidence-based practice
• Be cost effective
• Be easily applied
• Manage moderate to large amounts of exudate
• Decrease pain with dressing changes
• Be atrunmatic to the wound and periwound skin

CASE PRESENTATIONS

Case Study # 1: Lower Extremity Venous Insufficiency Wound

Initial evaluation:
- Macerated, erythematous periwound
- Stage III pressure ulcer, 5.0cm x 6.0cm x 1.8cm
- Erythematous, moist periwound, with signs of candidiasis
- Pain score 8/10 with dressing changes (normal saline moistened gauze – BID)
- Required medication every 4-6 hours due to dressing changes and burning sensation of peri-wound skin
- 2+ pitting edema
- Pain score 9/10 with dressing changes
- Wound healed

One Week Later:
- Significant decrease in foul odor and turquoise color of exudate
- Reduced dressing change frequency by IHIA to 2 times per week
- Patient able to perform 3rd dressing change which was done for showing purposes

6 weeks later:
- Patient reported pain score 0/10 with subsequent dressing changes
- Wound healed

Case Study # 2: Candidiasis

Initial evaluation:
- 2+ pitting edema
- Wound measurements: 14cm x 20cm x 0.1cm
- Copious amounts of foul smelling, turquoise colored, purulent exudate with signs of candidiasis

One Week Later:
- Stage III pressure ulcer, 5.0cm x 6.0cm x 1.8cm
- Erythematous, moist periwound, with signs of candidiasis
- Pain score 8/10 with dressing changes (normal saline moistened gauze – BID)
- Required medication every 4-6 hours due to dressing changes and burning sensation of peri-wound skin
- Topical dressing changed to a silver alginate and covered with Mepilex Ag to address periwound candidiasis

One Week Later:
- Wound 5.0cm x 3.0cm x 1cm
- Candidiasis resolved
- Pain score 0/10 with dressing change

REFERENCES:

OUTCOMES/FINDINGS: In all cases Mepilex® Ag with Safetac® technology was able to:

• Effectively minimize signs and symptoms of wound bioburden
• Effectively manage periwound candidiasis
• Allow for patient education and instruction for “self” dressing change due to ease of application.
• Provide atrumatic removal and minimize trauma and pain
• Eliminate premedication for dressing changes

FINANCIAL IMPACT:

In 2 of the 3 cases (cases 1 and 3), patient visits were able to be reduced from 3 times weekly to 1 or 2 times weekly due to the fact that the patients were able to be taught dressing application and anxiety over dressing change was minimized. The self adherence property allowed for patients to securely and easily wrap dressings in place. Savings to the home health agency (based on nurse visit of $120.00/day):

Case 1: Reduction of 5 nursing visits $600.00 / episode
Case 3: Reduction of 10 nursing visits $1200.00 / episode

CONCLUSION: The goal of the wound team was to provide a wound treatment plan that would be evidence-based while being cost effective regarding labor costs and the use of advanced wound care supplies. Identifying a dressing that could be easily applied, absorb moderate to large amounts of wound exudate, decrease overall pain with dressing changes and decrease bioburden was important for both the patient and the agency. The data collected through documentation regarding exudate management, numbers of dressings needed, and decrease in trauma and pain and length of time to healing supported the continued use of Mepilex® Ag. The single most important finding of this evaluation was the significant improvement in the quality of life for these three patients.

FINANCIAL ASSISTANCE/DISCLOSURE

Molinykly HealthCare US, LLC provided assistance with poster design.
Enhancing Patient Outcomes – Reducing the Bottom Dollar:
The Use of Antimicrobial Soft Silicone Foam Dressings in Home Health

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