

# Incorporating advanced wound care to help restore skin health in three patients with peristomal skin complications

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## Objective:

To obtain clinical assessments of three patients experiencing a peristomal skin complication of partial thickness wounds being managed with ovine collagen extracellular matrix (CECM)\* and gentian violet/methylene blue (GV/MB) polyurethane (PU) antibacterial foam dressings\*\* to help restore their peristomal skin health.

## Abstract:

Peristomal skin complications are a common occurrence for many patients with an ostomy. They may impair adhesion of the pouching system, which in turn exacerbates the skin problem, potentially leading to further peristomal wounds. Patients with peristomal skin complications can have higher cost of post-surgical care than those who do not develop complications.<sup>1</sup> Usually, standard treatment and obtaining a proper fit manages the issue. However, when the “usual” does not help or there are severe skin complications the CWOCN needs more management options. Reportedly, nearly one million people in the United States and Canada will undergo ostomy surgery.<sup>2</sup> Despite pre-operative discussions on stoma site selection, allergy assessment, and type of ostomy appliance chosen, peristomal skin issues and wounds still occur in a number of ostomy patients.<sup>3</sup> Many complications include – but are not limited to – pain, skin irritation, denudment, infection, and decreased appliance wear time.<sup>4</sup> Skin treatments often include ostomy paste, ostomy rings, powders, films and topical steroids, as well as assessment and reassessment of proper appliance fitting. However, advanced wound care dressings for peristomal wound management may be considered. A collagen dressing with an intact extracellular matrix (CECM) can help provide protease modulation, support granulation tissue formation and re-epithelialization. GV/MB antibacterial foam dressings can help reduce bioburden and manage moisture in the peristomal wound. We will present three of our more difficult cases. The dressing used for these documented paristomal partial thickness wounds were reimbursed, making it affordable for these patients. Our goal was restoration of pouch adhesion, rapid epithelization, and a return to quality of life for the patient. Published literature shows that these advanced wound care products promote healing of a variety of wounds.<sup>5, 6</sup>

## Methodology:

These wounds were managed with CECM and GV/MB PU or PVA antibacterial foam dressing to help manage proteases, bioburden and exudate. The patients were followed through wound closure. (One patient did not return to the wound center because he was completely healed and did not feel the need to return for follow up.)

## Conclusion:

For an appliance pouching system to adhere properly, the skin around the stoma must be dry and intact. When peristomal irritation leads to skin breakdown and partial or full thickness wounds, clinicians should consider more advanced wound care products as a solution. In these cases, utilizing CECM and GV/MB antibacterial foam dressings contributed to the successful resolution of these various peristomal wounds, which enabled stable adherence of the appliance to the skin and improved quality of life for the patient.

### Case Study 1: Urostomy

Patient: 76 year-old male had urostomy placed for bladder cancer. No problems post-op, no skin issues until one month later.

#### Age of wound:

- Approximately 2 months

#### Previous wound management:

- Stoma powder & skin prep for about 2 months with no wound improvement

#### Wound description:

- Denuded skin in patches circumferentially around stoma. Patient reported constant pain and burning at a 5 out of 10 and would at times go as high as a 8-9



#### Day 1

##### Wound measurement:

Within the area of the 2 ¼" wafer

##### Wound description:

Denuded moist red tissue and intact skin is macerated due to constant urine leakage. Patient cared for ostomy on his own.

##### Wound management:

- Cleansed wound and pat dry
- Applied light coat of stoma powder –covered with GV/MB PU antibacterial foam dressing
- Covered with hydrocolloid and ostomy wafer
- Dressings were changed about every 4 days and returned to clinic about every 3 weeks



#### Week 3 - Application photos

##### Wound measurement:

Patchy areas around stoma

##### Wound management:

- On second visit (week 3) wound area cleansed
- CECM applied to denuded areas, covered with GV/MB PU antibacterial foam, and secured with a hydrocolloid dressing
- Barrier ring barrier and two piece ostomy appliance applied
- Patient was instructed on how to apply product; dressings were changed about every 4 days



#### Week 11

##### Wound measurement:

Wound closure

##### Wound description:

Patient continued to be independent with his care and intact skin

### Case Study 2: Colostomy

Patient: 75 year-old female with 6 year old colostomy and a large hernia. Stoma has effaced and torn skin surface (hernia is the size of ½ a football).

#### Age of wound:

- Wound continued to deteriorate for 3 months

#### Previous wound management:

- None; Patient has not worn hernia belt

#### Wound description:

- Patient reported pain level of 10 out of 10 and taking morphine sulfate extended-release tablets for it



#### Day 1

##### Wound measurement:

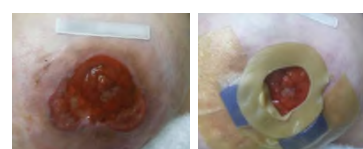
1.4 cm X 1.1 cm X 0.1 cm

##### Wound description:

Due to large hernia, stoma has effaced and developed ulcers on peristomal skin at 4 and 8 o'clock

##### Wound management:

- Wound cleansed
- CECM applied to ulcerated area, covered with GV/MB PU antibacterial foam, and secured with a hydrocolloid dressing
- Sealed edge with stoma paste and applied two-piece ostomy appliance
- Dressing changed every 3 days & PRN for leaking



#### Day 12 - Application photos

##### Wound measurement:

1.4 cm X 1.1 cm X 0.1 cm

##### Wound management:

- Wound cleansed
- CECM applied to ulcerated area, covered with GV/MB PU antibacterial foam, and secured with a hydrocolloid dressing
- Sealed edge with stoma paste and applied the appliance



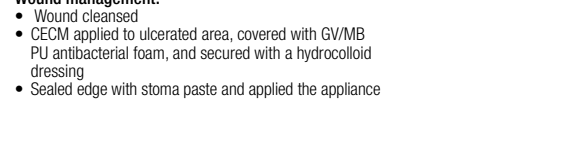
#### Day 26

##### Wound measurement:

1.4 cm X 1.1 cm X 0.1 cm

##### Wound management:

- Wound cleansed
- CECM applied to ulcerated area, covered with GV/MB PU antibacterial foam, and secured with a hydrocolloid dressing
- Sealed edge with stoma paste and applied the appliance



#### Day 33

##### Wound measurement:

1.4 cm X 1.1 cm X 0.1 cm

##### Wound management:

- Wound cleansed
- CECM applied to ulcerated area, covered with GV/MB PU antibacterial foam, and secured with a hydrocolloid dressing
- Sealed edge with stoma paste and applied the appliance



#### Day 47

##### Wound measurement:

1.4 cm X 1.1 cm X 0.1 cm

##### Wound management:

- Wound cleansed
- CECM applied to ulcerated area, covered with GV/MB PU antibacterial foam, and secured with a hydrocolloid dressing
- Sealed edge with stoma paste and applied the appliance

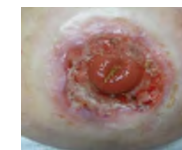


### Case Study 3: Peristomal ulcer

68 year-old male. Mesh removed from abdomen from a previous hernia. The skin around the stoma was debrided in the OR for better mobilization of mesh removal.

#### Previous wound management:

- Silver alginate and hydrocolloid over open tissue/skin.



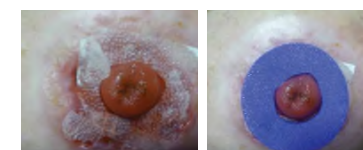
#### Day 1

##### Wound description:

1.5 cm circumferential peristomal tissues

##### Wound management:

- Wound cleansed
- CECM applied to ulcerated area, covered with lightly saline moistened GV/MB PVA antibacterial ostomy ring
- Covered by barrier ring and two-piece ostomy applied
- Dressings changed twice a week & PRN for leaking



#### Day 15 - Application photos

##### Wound measurement:

1.4 cm X 1.1 cm X 0.1 cm

##### Wound management:

- Wound cleansed
- CECM applied to ulcerated area, covered with lightly saline moistened GV/MB PVA antibacterial ostomy ring
- Covered by barrier ring and two-piece ostomy applied
- Dressings changed twice a week & PRN for leaking



#### Day 22

##### Wound measurement:

Circumferential from 0.6 cm – 1.0 cm

##### Wound description:

Ulcer decreased in size and healthy granulating tissue noted

##### Wound management:

- A week after this picture, patient reported ulcer had closed to just a thin line around stoma. Patient cancelled appointment and did not return.



## REFERENCES

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\* Endoforn dermal template, manufactured for Hollister Incorporated.  
\*\* Hydrofera Blue Ready foam, manufactured for Hollister Incorporated.

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