PAIN REDUCTION AND IMPROVED HEALING OF PERISTOMAL PYODERMA GANGRENOSUM USING SUPER ABSORBENT WOUND FILLER

Diana Gallagher, MS, RN, CWOCN, CFCN and Patti Gable Burke, BSN, RN, CWOCN

Introduction

Peristomal Pyoderma Gangrenosum (PPG) is challenging. It was identified by Brocq in 1916, but in over 9 decades, its etiology and pathophysiology remain poorly understood. It is a reactive inflammatory dermatosis and part of the spectrum of neutrophilic dermatosis. Without a clear understanding of etiology, treatment options vary widely. No individual therapy has been universally effective, Pyoderma Gangrenosum (PG) treatment involves a regimen of systemic, cutaneous and/or intra-lesional medications including corticosteroids, immunosuppressive agents, and antibiotics. PG anywhere on the body is difficult, but when around a stoma, wound and ostomy expertise are critical in achieving pain management, optimal wound healing and acceptable pouching intervals.

This case series offers an innovative use for a highly absorptive dressing, Gold Dust™. The concept was accidental. A patient replaced the alginate traditionally used for PPG with the reconstituted Gold Dust™ that he was using on his other wounds. The change was a desperate attempt to decrease pain to a tolerable level. It was surprisingly effective. The hope was that healing would not be delayed. The result was decreased pain AND improved healing. The protocol has been replicated on 5 patients. All enjoyed the same end results.

This study included six patients from 2 states and 4 different care settings. All patients were diagnosed with Crohn’s and/or Ulcerative Colitis.

Patient Population

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Treatment Protocol

Prior to being entered into this study, patients had used a variety of products including Aquacel AG, Hydrofera Blue, Polymem WIC and pharmaceutical products. No one option had offered good success. All patients were eager to participate without compensation.

After gentle cleaning with a non-cytotoxic product, the wounds were outlined with Brava strip paste or Eakin’s to form a dam. Because of the different care settings, patients were provided with different primary layers. One patient had no primary dressing at all. Primary layers included:

- finely crushed 10 mg Prednisone tablets
- Stimulen Powder
- Cortisone Powder
- Ostomy Powder
- No primary layer

All primary layers were sealed with a non-stinging skin prep spray. The Gold Dust™ was hydrated to a fluffy consistency resembling a dry snow. The exception was pouched with Eakin's pouch directly over the dressing. This combination allowed routine wound and ostomy dressing changes every 3-4 days for an improved quality of life. There was a cost savings to both patients and facilities. The prior combination of dressings and ostomy supplies normally resulted in more frequent changes to address leakage. The study protocol eliminated the change frequency and returned patients to their normal pouch change intervals.

**Results**

<table>
<thead>
<tr>
<th>Patient</th>
<th>Initial Pain</th>
<th>Pain after 24 hours</th>
<th>Initial Measurements</th>
<th>Time to healing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) JM</td>
<td>9</td>
<td>1</td>
<td>34mm x 28mm x 6mm</td>
<td>19 days</td>
</tr>
<tr>
<td>2) WD</td>
<td>8</td>
<td>0</td>
<td>89mm x 46mm x 5mm</td>
<td>42 days</td>
</tr>
<tr>
<td>3) RW</td>
<td>7</td>
<td>3</td>
<td>59mm x 47mm x 7mm</td>
<td>46 days</td>
</tr>
<tr>
<td>4) FA</td>
<td>10</td>
<td>4</td>
<td>68mm x 70mm x 10mm</td>
<td>80 days **</td>
</tr>
<tr>
<td>5) JF</td>
<td>9</td>
<td>1</td>
<td>46mm x 31mm x 5mm</td>
<td>37 days</td>
</tr>
<tr>
<td>6) TP</td>
<td>10</td>
<td>3</td>
<td>59mm x 38mm x 6mm</td>
<td>51 days</td>
</tr>
</tbody>
</table>

**Patient #4** experienced a setback secondary to pneumonia which stalled his healing progress. Once his respiratory status was corrected, the healing resumed.

**References**

Bryant R, Nix D, Acute and Chronic Wounds Current Management Concepts. Elsevier 2012 pg 65-67 and

Huang B, Chandra S, Shih D, Skin Manifestations of Inflammatory Bowel Disease. Front Physiol: 2012; 3. 13. Published online 2012 February 6.


**Product Used**

* Gold Dust™

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