Managing Abdominal Periwound Skin Irritation with a Cyanoacrylate Advanced Skin Protectant

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Background

- Periwound skin management is an important aspect of preventing complications related to wounds or stomas.
- The surrounding skin needs to be kept clean and dry, protected from exudate, sweat, or contact-induced irritation. This goal can be achieved through the use of waterproof skin barriers such as a polymeric cyanoacrylate advanced skin protectant (CASP*), which applies as a rapidly drying liquid that solidifies into a waterproof film.

Purpose

- This case series describes the use of CASP to resolve skin irritation in 4 patients with abdominal wounds or stomas.

Methods

- In the case of stoma or pseudostoma, an ostomy pouch was used to collect high-output drainage.
- CASP was used due to the appearance of symptoms of skin irritation, including redness, pain, and itching.
- Prior to application of CASP, the skin was cleansed gently and thoroughly, per the manufacturer's instructions for use.
- CASP was applied using the foam applicator and allowed to dry.
- When necessary, CASP was reapplied every 2-3 days. CASP does not need to be removed prior to reapplication.

Cases

Figure 1. A 67-year-old patient with a history of type 1 diabetes, anemia, and with a larrge, pendulous abdomen presented with an abscess of the anterior abdominal wall, involving the fascia and loop of small bowel.

Figure 1A. Initial appearance of fistula with pseudostoma.

Figure 1B. Appearance after applications of CASP for 5 weeks.

Figure 2. A 78-year-old patient with rectal carcinoma, who underwent abdominoperineal resection with colostomy.

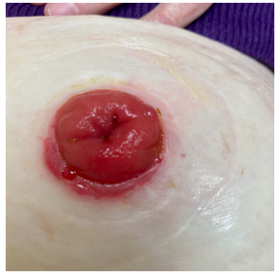

Figure 2A. Initial appearance of stoma.

Figure 2B. Stoma appearance after 2 weeks of CASP applications.

Figure 3. A 64-year-old patient with subtotal colectomy due to ulcerative colitis with 2 strictures. She developed an intra-abdominal abscess, requiring a proximal diverting loop ileostomy.

Figure 3A. Initial appearance of fistula with pseudostoma.

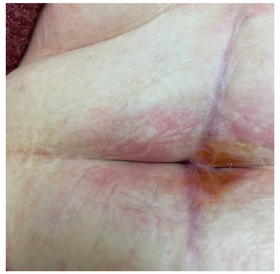

Figure 3B. Appearance after applications of CASP for 2 weeks.

Figure 4. A 57-year-old patient with Crohn's disease, hypertension, and insulin-dependent type 2 diabetes, with an ileostomy 18 years prior.

Figure 4A. Initial appearance of stoma with skin irritation.

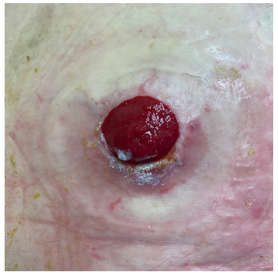

Figure 4B. Stoma appearance after 2 weeks of CASP applications.

Results (Cont'd)

- The patients were all female, aged 57-78 years old.
  - Patient 1 (**Figure 1**) was anemic with type 1 diabetes, presenting with a high-output fistula caused by an anterior abdominal wall abscess.
  - Patient 2 (**Figure 2**) required management of a stoma following abdominoperineal resection for rectal cancer.
  - Patient 3 (**Figure 3**) had a nonhealing surgical wound following multiple surgeries for colectomy, abdominal abscess, and ileostomy.
  - Patient 4 (**Figure 4**) had a history of Crohn's disease, hypertension, and type 2 diabetes, and presented with a stoma after ileostomy 19 years prior.
- The patients experienced pain, itching, and erythema in the periwound area, and in the cases of Patient 2 and 4, poor adhesion of the ostomy pouch.
- CASP was applied to the periwound skin every 2-3 days for 2 to 5 weeks.
- During this time, the skin exhibited reduced erythema and improved re-epithelialization.
- The patients reported less pain and irritation after CASP use was initiated.

Conclusion

- The application of CASP was effective in protecting fragile skin from moisture and friction, supporting a healthy periwound environment.

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NOTE: Specific indications, contraindications, warnings, precautions and safety information exist for these products and therapies. Please consult a clinician and product instructions for use prior to application. Rx only.

*3M™ Cavilon™ Advanced Skin Protectant (3M, St. Paul, MN)

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