Maintenance of intact peristomal skin is a constant challenge for clinicians caring for patients with stomas, but particularly in patients with allergic contact dermatitis. Localized allergic responses to products used for ostomy management often are manifested on the skin around the stoma or under ostomy pouching systems. The risk of absorption and hypersensitivity from products used on the skin for cleansing, treatment, and/or protection is increased because the peristomal skin is often macerated, broken, or friable.

Allergic contact dermatitis is an immunologic response that causes inflammation and manifests in weeping, crust- ing, edema, erythema, vesicles, and almost always, itching, and is more common in adults than children.

The skin must be exposed to an allergen for allergic contact dermatitis to manifest — a process that occurs in two phases. The first phase is called the sensitization phase, where the skin is exposed to an allergen for about 7 days. Molecules from the allergen pass through the epidermis and attach themselves to the epidermal protein found on the surface of the Langerhans cell. From here, the allergen is exposed to T-lymphocytes in the lymph node where the body “memorizes” the antigen.

When that antigen is exposed to the skin for a second time, the elicitation phase is initiated — usually within 1 to 2 days of re-exposure. Once the Langerhans T-cell delivers the antigen to the memory T-cells in the skin, effector T-cells begin to produce lymphokines, which summon inflammatory cells. This causes visible manifestations in the area where the allergen had direct contact with the skin. In the case of an ostomy, this reaction may be visible under tape, under pouch material, under a faceplate or skin barrier, or on the skin where creams or lotions (or a combination) have been used. The patient’s body has developed an altered reaction to the material or substance to the extent that even a much later exposure to those same materials or substances will result in an allergic reaction.

Some of the most common allergic sensitizers (some of which may be used for or contained in ostomy management products) include: rubber compounds, benzocaine (used in anti-itch creams), preservatives (ethylenediamine, a preservative found in nystatin/triamcinolone creams and ointments often used in ostomy care, aminophylline, insecticides, and synthetic waxes), vitamin E, aloe vera, fragrances, parabens, diphenhydramine (Benadryl® spray or Caladryl® lotion, Pfizer, Inc., New York, NY), neomycin (Neosporin®), (Pfizer, Inc., New York, NY), and para-aminobenzoic acid (PABA).

Other common allergens associated with ostomy care are soaps, cleansers, moisturizers, and cosmetics. Sometimes, chemicals of similar structure cross-react, causing the patient who is sensitive to one product to react to several other products.

The most direct test of whether a patient is having an allergic response to a product is through controlled exposure to reproduce the symptoms and observing signs of reaction. This can occur in the form of a skin patch or simply by having the individual use or apply the offending allergen to the skin.

Clinicians play a key role in choosing ostomy management products for their patients. With this role comes the responsibility of knowing as much as possible about the product and the individual patient upon whom it is used. There are vast legal implications of using products inappropriately or using inappropriate products. Well formulated, non-irritating, clinically proven, quality products should be selected. Products without dyes and perfumes should be selected to minimize the potential of allergic contact dermatitis.

Many products, including some ostomy products, are marketed as “hypoallergenic.” Clinicians may incorrectly believe that these products are “safer” for their patients than others. The word “hypoallergenic” implies that the product is less likely to cause allergic reactions than other products. However, no regulatory or government language exists that clearly defines or governs the use of the term “hypoallergenic.” The FDA’s position on the subject is that the agency knows of no scientific evidence that
demonstrates fewer adverse reactions from products labeled hypoallergenic than those experienced with competitive conventional products. This means that manufacturers are permitted to continue to label and advertise their products “hypoallergenic” without supporting evidence.

Clinicians should use and recommend products that reduce the potential of irritation and allergic contact dermatitis — especially for older ostomy patients whose skin has a decreased barrier capacity. A detailed patient history investigating any past allergic reactions to products and/or skin sensitivity should be conducted before recommending any products to be used for ostomy management — ie, pouching systems, skin barriers, cleansing solutions, and tapes. A complete understanding of the ingredients contained in topical products is also necessary before use. It is the responsibility of clinicians to demand well formulated products that perform according to label statements in order to reduce the potential for peristomal skin irritation. Any reactions to products used by the patient to care for the ostomy or peristomal skin or manifestations of allergic contact dermatitis should be described and documented accurately and reported in a timely fashion. The patient and the healthcare team should be alerted to discontinue the use of the offending product immediately.

References