Moisturizers: False Claims and Allergic Ingredients

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It will not be wrong to mention that modern cosmetic and skin care products are mostly safe today and the chances of adverse reactions to them are very rare in spite of the fact that a large number of people are using these products over a lifetime. However, with an ever-rising need of intensifying the biological activity and therapeutic efficacy of these cosmetic products, it will not be possible to avoid the risk of side effects increasing in the future. Hence, it becomes important for dermatologists to familiarize themselves with all possible untoward reactions to cosmetics.

WHAT ARE ADVERSE REACTIONS IN SKIN CARE PRODUCTS?

Adverse reactions encompass an extreme variant of sensitive skin known as "cosmetic intolerance syndrome" which describes those individuals who are no longer able to tolerate a wide range of cosmetic products. However, "true" allergic reactions to cosmetics occur much less commonly than irritant reactions. These reactions are more serious in nature, difficult to treat and need to completely avoid the agent causing it. Damaged eczematous skin is at an increased risk to develop such allergies.¹

WHAT ARE CONSUMERS LOOKING FOR AND WHAT IS THE DERMATOLOGISTS TAKE?

Considering moisturizer use to be critical for the prevention and treatment of numerous dermatological conditions, patients frequently request the dermatologist for product recommendations. A cohort study showed that among the commonly available moisturizing products available in the market, they varied by price and marketing claims and the lotions were the most popular choice. Out of the 174 products listed in the study, only a few best-selling moisturizers were free of potential allergens.² The cohort study revealed that the

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most popular product lotions was followed by creams, oils, butter and lastly ointments.²

While recommending moisturizers to patients with skin conditions that benefit from over-the-counter moisturizer use, dermatologists should base their recommendations on the broad availability and affordability of the product with a low risk of potential allergenicity.² It is important for the dermatologists to balance consumer preference, price and allergenicity in their recommendations, in view of dearth of readily available comparison data on moisturizing efficacy of these products.² It is also important for the dermatologists to discuss with parents and patients that baby moisturizing products can differ in allergenicity and irritancy.³

ALLERGENS PRESENT IN MOISTURIZERS

The cohort study involving publicly available data of the top 100 best-selling whole-body moisturizing products at 3 major online retailers revealed that in the total study sample, only 12% of the best-selling moisturizing products were free of the North American Contact Dermatitis Group (NACDG) allergens. The 3 most common allergens found in these products included fragrance mix, paraben mix and tocopherol.²

Recently, it has been seen in a study that alkyl glucoside is present in various leave-on cosmetic products such as sunscreens and facial moisturizers. Alkyl glucosides are contact allergens which were recently named as the 2017 "Allergen of the Year" by the American Contact Dermatitis Society (ACDS) partially due to the increasing prevalence of positive patch-test reactions. It has been found that among the 20 best-selling facial moisturizers, almost 10% contain alkyl glucoside in their ingredients.⁴

Another new contact allergen, caprylhydroxamic acid has also been found to cause an epidemic of allergic contact dermatitis in patients using moisturizers containing this preservative.⁵

LABELING ISSUES

It has been seen that products labeled with claims such as, "dermatologist recommended" and "phthalate free" are sold at a higher median price as compared

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to the ones without such claims. It was also seen that products, which claimed to be "fragrance-free" had at least 1 fragrance cross reactor or botanical ingredient.²

One of the major concerns in this regard is the use of misleading labeling in various skin care products for babies. Parents consider baby products to be safe and gentle for their babies but it has been seen that many baby moisturizers contain various fragrance factors such as organic calendula, sweet almond oil, and sunflower oil; many baby products also contain lanolin.³ A study published in 2016 conducted a systematic review of patch test in children and adolescents and revealed that top 5 most common allergens in children were nickel, thimerosal, cobalt, fragrance and lanolin.⁶

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