

TABLE 1. Skindex-16 and Skindex-Mini Scores

	Skindex-16	Skindex-Mini
Symptoms		
Pretreatment	33	—
3 mo after treatment	25	4
8 mo after treatment	—	1
Emotions		
Pretreatment	48	—
3 mo after treatment	40	4
8 mo after treatment	—	1
Functioning		
Pretreatment	17	—
3 mo after treatment	60	3
8 mo after treatment	—	2

Skindex-16 scores are based on a total score of 60, and Skindex-mini scores are based on a total score of 6.

immunosuppressive agents, proving to be a promising therapeutic option for CP.⁴ Dupilumab was successful at alleviating itch, resolving prurigo nodules, and improving QoL in this patient. Gabapentin initially provided modest relief of uremic pruritus. Significant improvement of symptoms as demonstrated by QoL measures was noted after initiation of dupilumab. Although dupilumab is indicated for the treatment of AD, our findings suggest that it may be beneficial for other pruritus-related conditions, such as uremic pruritus and prurigo nodularis. Furthermore, treatment with dupilumab in this transplant patient was well tolerated, and dose adjustments of concurrent immunosuppressive therapies were not required. The targeted mechanism of action likely mitigates the potential for drug-drug interactions.⁵ Dupilumab shows promise as an efficacious treatment option for an array of pruritic conditions and a safer alternative for immunosuppressed transplant patients.

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Excessive Mercury Levels in an Unregistered Cosmetic Whitening Product Causing Allergic Contact Dermatitis

To the Editor:

Skin whitening is an expanding global industry, especially in developing countries wherein a pervasive postcolonial notion of the superiority of lighter skin exists.^{1,2} Many of these lightening products contain mercury, a melanotoxin, hidden in their contents.² Consumers worldwide are at risk because many of these products are unregulated, mass distributed, and widely available. We report a case of a 27-year-old Filipino woman presenting with pruritic erythematous papules and plaques on the bilateral axillae and elbows after application of a whitening cream eventually found to be banned by the Philippine Food and Drug Administration. The findings of neurologic examination, as well as blood and urine mercury levels, were normal. Patch testing results revealed positive reactions to both mercury ammonium chloride and thimerosal (Fig. 1). Chemical analysis of the product revealed 6400 ppm of mercury. Lesions fully resolved with discontinuation of the whitening cream and use of topical corticosteroids.

Initial data show that mercury allergy is uncommon and rarely had relevance with previous sensitization from thimerosal-containing vaccines or dental amalgams,³ but with the advent of unregulated mercury-laden cosmetics, current prevalence may actually be higher and underreported. Sampling of 549 globally manufactured skin whitening products available in the United States revealed that 6% (n = 33) contained mercury of greater than 1000 ppm, with 15 samples having levels beyond 10,000 ppm despite regulatory limits set at less than 1 ppm.² Aside from causing contact dermatitis, their real danger lies in their possible systemic toxicity, which is mainly neurological (tremors, muscle weakness, visual and vasomotor disturbances, memory loss, paresthesias, and impaired neurological development in children) and renal (oliguria/anuria, proteinuria, tubular necrosis, glomerulonephritis)⁴ in nature.

The authors have no funding or conflicts of interest to declare.

DOI: 10.1097/DER.0000000000000547

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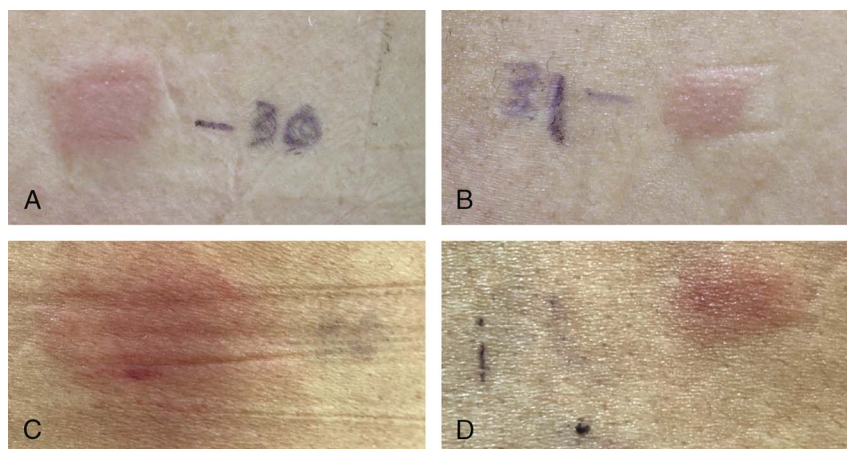


Figure 1. Patch test results to #30, mercury ammonium chloride (A and C), and #31, thimerosal (B and D), both showing ++ on days 2 and 4.

A survey examining the usage of skin whiteners among Filipino consumers ($n = 110$) showed that 90% are women with a median age of 28.5 years, who rely primarily on commercial information, with fewer basing selection of products on safety and tolerability. Toxic skin whiteners are cheaper and easily purchased without a prescription. Many consider them safe because of innocuous packaging, over-the-counter availability, and consumer testimonials. Adverse effects (rashes, discoloration, acne, infections, and scarring) were reported in a quarter of respondents; the remaining majority, however, did not experience such adverse reactions, furthering confidence in the usage of these whitening products.¹

Thimerosal serves as the usual hapten for determining mercury sensitization, with most positive results indicating a mercury allergy. However, some detect allergy to the thiosulfate portion of thimerosal; addition of both ionized (eg, mercury chloride) and nonionized mercury is suggested for completion.⁵ In our case, both mercury ammonium chloride and thimerosal were tested, strengthening the diagnosis of allergic contact dermatitis to the product's mercury content.

In cases of contact dermatitis to unregulated lightening agents, mercury should be considered as a possible culprit allergen, and it is prudent to include these allergens in patch testing. A high index of suspicion should prompt further screening and determination of product mercury content, body mercury levels, and possible clinical mercury toxicity. Lastly, these documented cases should be reported to the local drug authorities to strengthen vigilance and improve public health safety.

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