

TABLE 1. Relevant Patch Test Allergens

Category (Number of Positives)	Allergen	Positives*
Fragrances (17)	Hydroperoxide of linalool	3
	Fragrance mix I	2
	Fragrance mix II	2
	Hydroperoxide of limonene	2
	Hydroxycitronellal	2
	Cinnamic aldehyde	1
	Farnesol	1
	Jasmine	1
	Lylal (hydroxymethylpentylcyclohexenecarboxaldehyde)	1
	Oak moss	1
	Perfume mix	1
Metals (9)	Nickel/nickel sulfate hexahydrate	6
	Cobalt/cobalt chloride hexahydrate	3
Preservatives (8)	Methylisothiazolinone	2
	Sodium metabisulfite	2
	Formaldehyde	2
	Propylene glycol	1
	Iodopropynylbutyl carbamate	1
Surfactants (3)	Decyl glucoside	2
	Dimethylaminopropylamine	1
Medicaments (2)	Budesonide	1
	Bacitracin	1
Resin (1)	Colophony	1
Plants (1)	Sesquiterpene lactone	1

*Definite, probable, or possible relevance.

Trends in Eyelid Dermatitis

To the Editor:

Eyelid dermatitis is uncomfortable for patients and can cause a diagnostic conundrum for clinicians. The etiology of cases may be multifactorial, and as such, arriving at the appropriate diagnosis can be challenging.¹⁻³ To better characterize trends in clinical presentation, we conducted a retrospective review of all cases of eyelid dermatitis for patients who were patch tested at the University of North Carolina at Chapel Hill Dermatology and Skin Cancer Center between 2008 and 2015.

Using the North American Standard Series, T.R.U.E. Test, or a smaller, more personalized series based on specific exposures, patch tests were placed in clinic and patients returned at 48 and 96 hours for evaluation. Presumed cosmetic allergens were also placed to evaluate reactivity to specific products.

Of the 268 patients who were patch tested, 68 (22.1%) experienced eyelid dermatitis and were analyzed in this study. Only 22.0% of the patients with eyelid dermatitis had it exclusively on the eyelids, whereas others also had involvement of the head and neck (30.9%) or elsewhere on the body (47.1%). Patch testing was positive in 40 (58.8%) of the patients with eyelid dermatitis, with 9 of the positive patch tests considered noncontributory. Although allergic contact dermatitis (ACD) was the most prevalent diagnosis (48.5%), atopic dermatitis (26%) and irritant dermatitis (17.6%) also affected a sizable portion of our study population.

Trends in laterality of eyelid dermatitis showed that ACD was the only diagnosis noted in our patients with unilateral symptoms. In bilateral disease, ACD, atopic dermatitis, and irritant dermatitis affected 47%, 27.3%, and 18.2% of the population, respectively. Most patients experienced bilateral upper and lower eyelid involvement (66.2%), and none of the patients experienced unilateral lower eyelid involvement.

Metals, including gold and nickel, represent 17.5% and 15% of positive patch tests, respectively, followed by balsam

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of Peru (12.5%) and bacitracin (10%). These findings are consistent with the previous studies that have identified gold as the most common allergen in ACD of the eyelids, whereas others have found that nickel predominates.^{1,4} Of note, all of our patients with metal allergy had bilateral eyelid dermatitis, whereas ingredients in topical cosmetic and medical products were implicated in both unilateral and bilateral diseases. In the cases of unilateral ACD, bacitracin was the most common culprit.

A previous study noted that 4-eyelid involvement is the main risk factor for ACD.⁵ Although most ACD cases in our clinic did have 4-eyelid involvement, ACD was also the sole cause of unilateral eyelid dermatitis. Differentiating diagnostic etiologies of eyelid dermatitis by physical examination is difficult, obliging clinicians to rely on other clinical clues to make a diagnosis. Our findings suggest that eyelid laterality can aid clinicians in making the correct diagnosis, and ACD should be higher on the differential for patients with unilateral involvement.

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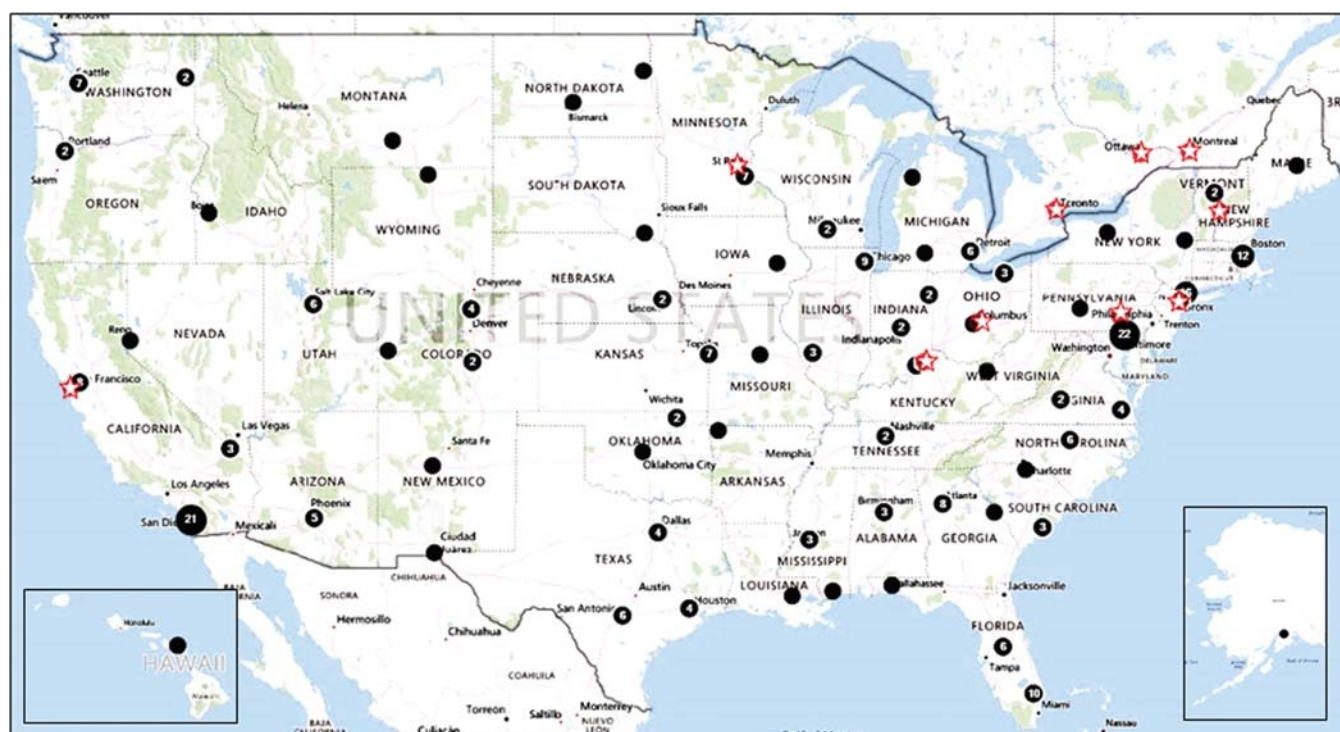
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Contact Dermatitis in Underrepresented Minority Children

To the Editor:

The demographics of the US population are actively changing; thus, there is a growing need to study representable cohorts of dermatologic patients. Specifically, the US Hispanic population has been significantly increasing for the past several decades. In 2000, the US Census Bureau reported that the percentage of Hispanics surpassed the percentage of African



★ NACDG Pediatric Patient Data Sites
● Pediatric Contact Dermatitis Registry Members

Figure 1. Map of active NACDG members and PCDR members.