Contact Dermatitis? Consider Patients' Clothing

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Bethesda, Md. — Formaldehyde resins found in permanent press clothes may cause some cases of contact dermatitis.

"Clinically, you have to have a high index of suspicion whenever anyone comes in with a chronic eczematous rash," Ryan Carlson, D.O., reported at a meeting on contact dermatitis.

If the rash site corresponds to a place where clothing fits tightly to the skin—such as the waistband, posterior neck, upper back, and the anterior and posterior axillary folds—then consider textiles as a source of the dermatitis.

Sometimes atypical presentations occur, said Dr. Carlson, an intern at the University Hospitals of Cleveland.

For example, one patient developed a rash on his forehead from a baseball cap that had formaldehyde resins in the fabric of the lining.

Previous investigators have found that patch testing with formaldehyde alone

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naldehyde alone identifies 70% of patients who are sensitive to formaldehyde resins. Therefore, it is also necessary to patch test the resins to confirm the presence of textile dermatitis.

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patch testing for textile-related allergic contact dermatitis include dimethylol dihydroxyethylene urea 4.5% aqueous (Fixapret CPN) and ethylene urea melamine formaldehyde 5% mix in petroleum (Fixapret AC).

Dr. Carlson reviewed patch test results for 574 women and 278 men with contact dermatitis who were tested for a formaldehyde allergy between August 1999 and April 2004.

Overall, 7.2% of the cases—33 women (5.7%) and 28 men (10.1%)—tested positive, Dr. Carlson said..

In addition, 13 of the 574 women (2.3%) and 4 of the 278 men (1.4%) tested positive for Fixapret AC.

"Historically, women have been more susceptible to textile dermatitis than men, with ratios in the 3:1 and 5:1 range, but our data show a ratio of approximately 1:1," he said.

Many patients with textile resin allergy are originally sensitized to formaldehyde in the workplace and react to formaldehyde resins in textiles later in life, Dr. Carlson noted.

He cited the case of a woman who developed an allergy to formaldehyde when a disinfectant containing formaldehyde was used in her workplace, and then later reacted to a formaldehyde resin in her lab coat.

The condition resolved when she

stopped wearing the coat, Dr. Carlson said.

Allergens such as formaldehyde are rarely noted on clothing labels, nor do recommended wash cycle instructions indicate whether the clothing has some type of permanent press finish.

In general, advise patients with a history of textile-related contact dermatitis to read clothing labels and avoid any permanent press or wrinkle-resistant fabrics as well as rayon and 100% cotton fabrics that do not wrinkle.

Instead, they should look for 100% linen, polyester, nylon, denim, flannel clothes, or lyocell (Tencel).

An allergic reaction can be reduced by wearing silk undergarments and loose-fitting clothing and by keeping the skin cool, Dr. Carlson said at the meeting, which was sponsored by the Experimental Contact Dermatitis Research Group and the American Contact Dermatitis Society.

He and his associates inquired about the

textiles used at several major clothing companies.

Among those who claimed to use little or no formaldehyde-releasing resin in the production of their textiles were Gap, Talbots, J.Crew, Eddie Bauer, and Liz Claiborne.

In addition to their use in textiles, formaldehyde-releasing preservatives are frequently used in skin care products, industrial products, and topical steroid treatments.





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