



COMMENT AND CONTROVERSY
Edited by Stephen P. Stone, MD

In pursuit of defining clinical relevance of positive patch tests results

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Abstract According to the current classification of clinical relevance of the positive patch test reactions, the positive results of patients who are allergic to various allergens that are not responsible for the present dermatitis do not fit into the category of “relevant to present dermatitis” but should be defined as “relevant to a preceding bout of dermatitis.” This seems to us inappropriate and misleading because reexposure to the sensitizing agent would quickly revert their reaction to “relevant to present dermatitis.” We suggest an alternative possibility to the current division of the various types of clinical relevance, namely, “relevance to a present allergy other than the presenting dermatitis.”

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Case 1

A 20-year-old female soldier was seen in our patch test clinic because of suspected textile allergy. She complained of a rash whenever she wore the standard issue military uniform.

When we saw her, she had had stopped wearing the uniform 1 month earlier and was free of rash. We performed patch tests with the European standard and with the textile color and finish series from Chemotechnique Diagnostics (Malmo, Sweden). The patch tests demonstrated a hypersensitivity reaction (+2) to nickel sulfate, to Disperse Blue 106, and to Disperse Blue 124. When she was given the patch test results, the patient recalled that she was allergic to metals and was unable to wear a metal watch or jewelry that contained metals other than gold.

Case 2

A 19-year-old female soldier was referred for consultation because of suspected shoe dermatitis. Patch tests with the European standard and with the shoe series from Chemotechnique Diagnostics demonstrated a positive reaction to fragrance (+2), potassium dichromate (+1) of the standard patch test tray, and to potassium dichromate (+1) of the shoe series. She was not surprised to hear the results of the patch test because she had known of her allergy to fragrance for years.

Discussion

These 2 routine patients of a contact dermatitis clinic exemplify one of the weaknesses in the definition and classification of clinical relevance of patch test results.

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The currently used classification of clinical relevance of the positive patch test reactions are¹⁻³:

1. Relevance to present dermatitis
 - A. Primary cause
 - B. Aggravating factor
2. Relevance to a preceding bout of dermatitis
 - A. Primary cause
 - B. Aggravating factor
3. Not relevant
4. Unknown or "unexplained positive"

If we analyze our patients' results for relevance, it would appear that the positive reaction of patient 1 to nickel and the positive reaction of patient 2 to fragrance mix are not compatible with the first classification (relevance to the present dermatitis) because they are not the sensitizers responsible for their current dermatitis. Nevertheless, one patient is allergic to nickel and the other is allergic to fragrance, and both are currently suffering from their allergies; but having avoided the sensitizers before examination, they are free of dermatitis, and their allergy is not the cause of the dermatitis for which they were tested. Categorizing their reaction to nickel and fragrance as having "past" relevance seems to us inappropriate and misleading because all they have to do is reexpose themselves to the sensitizing agent and the relevance would quickly revert to "present."

It follows, therefore, that an alternative possibility is needed in the current division of the various types of clinical relevance, namely, "relevance to a present allergy other than the presenting dermatitis." Thus, each of our patients would more accurately have 2 equally important present and relevant positive patch test reactions, one relevant to the dermatitis for which they were tested and the other to another dermatitis, both of them present and relevant (occult or overt).

The new classification will thus include these 4 categories:

1. Relevance to present dermatitis
2. Relevance to a present allergy other than the presenting dermatitis
3. Not relevant
4. Unknown or "unexplained positive"

Finally, we would like to cite a relevant comment by Kligman⁴: "Anyone can do patch test. Few do it well. Fewer still can properly interpret patch tests." Evaluating the relevance of patch testing is a difficult and controversial problem, with no easy solutions, no uniform concept, and is too often swept away under the patch.

We believe this is not only a semantic or academic issue. Questions like "How should I define the positive reaction to fragrance when the patient actually has a shoe dermatitis?" are an everyday occurrence in patch test clinics, and we believe the new classification will help solve them.

We have tried to address one specific point, suggested no more than a minor modification of the exemplary work of the pioneers in the field, and did not relate to the many other relevance issues that have been dealt with by others.⁵⁻¹¹

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