

DIFFERENCES IN THE EVALUATION OF SKIN PRICK TESTING RESULTS FOR FOOD ALLERGY DIAGNOSIS BETWEEN US AND UK PHYSICIANS.

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Background: Skin-prick testing (SPT) is an important diagnostic tool for assessing IgE-mediated hypersensitivity to food allergens. We examined regional differences between the United States versus the United Kingdom in evaluating SPT wheal and flare reactions for food allergy diagnosis.

Materials/Methods: A short, four-question survey was circulated via the national allergy/immunology societies (ACAAI and BSACI) to allergy specialists in the US and the UK in 2017 and 2018 respectively. Data was analyzed using contingency tables and Chi-Square-Test or Fisher-exact t-test statistics.

Results: The total number of responders were n=478 in the US and n=159 in the UK. When evaluating for food allergies, a higher percentage of US allergists measure both the wheal and the flare compared to UK physicians (82 vs 14 %, $p<0.01$). Many more UK allergists ignore the flare in the absence of the wheal (79 vs 69 %, UK vs US; $p=0.02$). Fifty-eight percent of US physicians will consider a positive flare response compared to only 22 % in the UK ($p<0.01$). Finally, the providers' practice with regards to measuring/considering the flare did not change over time in either region based on self-report (82 vs 84 %, US vs UK; $p=0.63$).

Conclusions: There are significant differences in SPT interpretation practices between allergists in the US and the UK, which may reflect regional diagnostic criteria standards. This has important clinical implications on the diagnosis and management of IgE-mediated allergic diseases. Our survey underscores the importance of standardizing SPT interpretation for the evaluation of food allergies in different countries.