Lessons from atopy patch testing in atopic dermatitis.

Abstract:
The exposure of atopic eczema (AE) patients to their relevant protein allergens (eg, from house dust mite, cat dander, grass pollen, or food allergens) can trigger an exacerbation or maintain the disease. Diagnostic procedures are needed to specify allergen avoidance recommendations for the individual patient. Skin prick tests and specific serum IgE tests might be helpful in pointing out potential trigger factors, but relevance needs to be confirmed (eg, with food provocation tests). The atopy patch test (APT) involves the epicutaneous application of intact protein allergens in a diagnostic patch test setting with an evaluation of the induced eczematous skin lesions after 24 to 72 hours. The APT targets the cellular component of AE and helps round out the AE test spectrum. As a number of apparently minor test modifications greatly influence the sensitivity, specificity, and reproducibility of the APT, the European Task Force on Atopic Dermatitis (ETFAD) has developed a standardized APT technique. It consists of purified allergen preparations in petrolatum, applied in 12-mm diameter Finn chambers mounted on Scanpor tape to non-irritated, non-abraded, or tape-stripped skin of the upper back. The APT is read at 48 and 72 hours according to the test criteria and reading key of the ETFAD for appearance of erythema, and number and distribution pattern of the papules. In contrast with skin prick tests, the APT might even detect a relevant sensitization in the absence of specific
IgE. Many studies have been undertaken to objectify the sensitivity and specificity of the APT to show its diagnostic use in clinical practice.