

Letter to the Editor

Lymphocyte transformation test in patients with allergic contact dermatitis

Dear Sir,

In the July issue of *Contact Dermatitis*, Hagemann et al. (1) remind us of an *in vitro* test for detecting and specifying the diagnosis of an allergic contact sensitization, a tool that has been around and neglected for decades. An Editorial on that paper by Basketter and Menne (2) tells us that it demonstrates 'how useful an objective test might be'.

The lymphocyte transformation test (LTT) has all the advantages of an *in vitro* method, namely, it is free of all the possible risks, hazards and disadvantages of *in vivo* patch testing, such as active sensitization from patch tests, 'ectopic' flare of dermatitis, localized reactions (Koebnerization, persistence of positive reactions, ulceration, keloid formation and alteration in pigmentation), systemic anaphylactoid reactions, systemic absorption of toxic and/or carcinogenic substances (contraindicated in pregnancy) and, finally, the inconvenience and time-consuming features of *in vivo* tests. It is a subjective method that relies on the observer's experience. On the other hand, as Basketter and Menne (2) note, '... significant success (LTT) was ever only achieved with nickel, an allergen only rarely associated with diagnostic difficulty'. Attempts to modify the LTT by measuring various cytokines secreted by the lymphocytes (3, 4) have inspired hope and expectations from these tests and convinced several researchers that this is the most promising direction.

Although we are reluctant to play the devil's advocate and abandon all hope, we must admit that we are far less enthusiastic about any method based on culturing lymphocytes in the presence of haptens because most of the tested substances are toxic to lymphocytes, even at very

low concentrations and, as such, those methods are not suitable candidates for testing most of the designated substances and for ever replacing the good old patch tests. Having said that, LTT and its newer modifications are excellent methods for testing hypersensitivity to drugs, as was well demonstrated in Hagemann et al.'s paper (1).

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References

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