

Letter to the Editor

The reliability of visual scoring of patch test reactions revisited

doi:10.1111/j.1600-0536.2011.02021.x

Dear Sir,

In *Contact Dermatitis* 2011;65:65–75, the authors describe the historical perspective on the use of visual grading scales in evaluating skin irritation and sensitization (1).

When they were commenting on the reliability of visual scoring of patch test reactions, two studies from 2007 were mentioned, namely references 51 and 52. However, we were the first to compare the concordance between different patch test readers when reading the test reactions independently from each other as well as blinded with regard to the sensitizers, thereby avoiding all reasonable factors implying bias (2). We showed a high level of agreement between how we read patch tests in four groups of patients, each group being allergic to one and the same sensitizer, with 10 patients in each group. We had no information on which of the four sensitizers was tested in the individual patient, or where the different concentrations of the sensitizer had been tested. We read each patient independently, only seeing the back of the patient, the rest being covered with a green cloth. When noting the morphological characteristics, we used a protocol whereby we had to tick off the various lesions that might be present, for example erythema covering or not covering the whole patch test area, infiltration covering or not covering the whole patch test area, the presence of papules, and few or many papules. We showed that it



was impossible to discriminate between zero papules and a few papules, and therefore a reading system that uses a few papules as a discriminating feature between two grading classes (+ and ++) should not be used.

At that time (1994), our study was a novel approach, basing the reading only on morphological features. This method has been very successful in teaching dermatologists how to read patch tests, and we have therefore continued to use it at our department, and also when performing multicentre studies (3).

Marléne Isaksson, Halvor Möller and Magnus Bruze

Department of Occupational and Environmental Dermatology, Malmö University Hospital, Malmö SE 205 02, Sweden

E-mail: marlene.isaksson@skane.se

Conflicts of interest: The authors have declared no conflicts.

Accepted for publication 14 November 2011

References

- 1 Farage M A, Maibach H I, Andersen K E, Lachapelle J-M, Kern P, Ryan C, Ely J, Kanti A. Historical perspective on the use of visual grading scales in evaluating skin irritation and sensitization. *Contact Dermatitis* 2011; **65**: 65–75.
- 2 Bruze M, Isaksson M, Edman B, Björkner B, Fregert S, Möller H. A study on expert reading of patch test reactions: inter-individual accordance. *Contact Dermatitis* 1995; **32**: 331–337.
- 3 Bruze M, Svedman C, Andersen K E et al. Patch test concentrations (doses in mg/cm²) for the 12 non-mix fragrance substances regulated by European legislation. *Contact Dermatitis* 2012; **66**: 131–136.