## Diagnose and Treat Occupational Hand Eczema Early to Prevent Poor Outcome!

Long-term follow-up studies of the prognosis and consequences of occupational hand eczema (OHE) are sparse. Risk factors for the continuation of OHE are: a long duration of hand eczema before diagnosis, respiratory atopy, skin atopy, and continuation in the same occupation.

Below is a summary of a paper by Mälkönen et al. The full reference for the article is: Mälkönen T, Alanko K, Jolanki R, Luukkonen R, Aalto-Korte K, Lauerma A, Susitaival P. Long-term follow-up study of occupational hand eczema. Br J Dermatol 2010; 163: 999–1006.

Occupational hand eczema (OHE) is often chronic, with a healing rate of 21–72% determined in studies with varying follow-up periods. The predictive factors for long-term OHE have been analysed in only a few studies and are currently unclear.

The research group, with members from the Finnish Institute of Occupational Health, Helsinki University Central Hospital, and North Karelia Central Hospital, carried out a questionnaire study to determine the medical and occupational outcome in patients with OHE after a follow-up of 7–14 years, and to identify the prognostic risk factors for the continuation of hand eczema. In total, 605 of 755 patients (response rate 80.1%) who had OHE in the fingers, palms, dorsa of the hands, wrists or forearms were included in the study. The study population comprised subjects with a wide range of occupations examined in the same national referral unit.

The hand eczema had healed (= no hand eczema during the past 12 months) in 40% of the patients. If the hand eczema had lasted only one year or less, the tendency to heal was most frequent. The poorest prognosis was associated with a duration of OHE of more than 10 years: in the multivariate logistic regression analysis, the odds ratio was 4.55, with a 95% confidence interval (CI) of 2.38–8.71. Healing of OHE

was poorer in patients with skin or respiratory atopy compared with non-atopic patients (with odds ratios of 1.86 and 2.69, and 95% CI 1.08–3.19 and 1.44–4.92, respectively). In addition, the presence of work-related chromate allergy was associated with poor healing. If the patient had not changed occupation, the risk of long-term OHE was higher, with an odds ratio of 1.55 (95% CI 1.03–2.34).

These results, indicating better prognosis of OHE with a short duration (less than one year) of hand eczema before diagnosis, emphasize the importance of early diagnosis and intervention. Preventive actions should be focused in particular on patients at the greatest risk for persistent hand eczema, i.e. those with respiratory or skin atopy. Changing occupation in order to tackle OHE is worthwhile, both medically and economically.



The first author of the study, Tarja Mälkönen, is a dermatologist at Helsinki University Central Hospital. The study is a continuation of a former study on occupational skin diseases published in the Contact Dermatitis 5: 261-268, 2009.

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