# Hand Eczema – A Major Challenge in Modern Dermatology

**Hand eczema is one of the major challenges in modern dermatology. The condition is chronic and incurable. The pathogenesis is complex and comprises genetic and acquired defects of skin barrier, autoimmunity and autoinflammation. Hand eczema is especially prevalent in the healthcare worker group, in which up to 30% have reported the symptoms. Currently, the best approach to hand eczema is prevention. This paper is the first of a kind where the efficacy of a secondary prevention program has been evaluated in a randomized, observer-blinded manner. Two hundred and fifty-five healthcare workers were randomized into control or intervention groups, the latter comprising individuals counselling with respect to skin protection techniques, hand washing habits, use of moisturizers, gloves and avoidance of irritants and allergens. After a 5-month follow-up the intervention group had a significantly lower severity of hand eczema than the control group. This study convincingly documents that a 30 min preventive consultation has a tremendous preventive impact on hand eczema.**

This is a summary of a paper recently published by Ibler et al. *The full reference for the article is: Ibler KS, Jemec GB, Diepgen TL, Gluud C, Lindschou Hansen J, Winkel P, Thomsen SF, Agner T. Skin care education and individual counselling versus treatment as usual in healthcare workers with hand eczema: randomised clinical trial. BMJ 2012 Dec 12; 345:e7822.*

This study was performed to evaluate the effect of a secondary prevention programme with education on skin care and individual counselling versus treatment as usual in healthcare workers with hand eczema. It is a randomised, observer-blinded parallel group superiority clinical trial in 3 hospitals in Denmark.

Two hundred and fifty-five healthcare workers with self-reported hand eczema within the past year were randomised centrally and stratified by profession, severity of eczema, and hospital. One hundred and twenty-three were allocated to a intervention group and 132 to a control group.

Education in skin care and individual counselling based on patch- and prick-testing and assessment of work and domestic related exposures. The control was treatment as usual.

The primary outcome was clinical severity of disease at a 5-month follow-up measured by scores on the hand eczema severity index. The secondary outcomes were scores on the dermatology life quality index, self-evaluated severity of hand eczema, skin protective behaviours, and knowledge of hand eczema from onset to follow-up.

Follow-up data were available for 247 of the 255 participants (97%). At follow-up, the mean score on the hand eczema severity index was significantly improved in the intervention group than control group: difference of means, unadjusted –3.56 (95% confidence interval –4.92 to –2.14); adjusted –3.47 (–4.80 to –2.14), both $p<0.001$ for difference. The mean score on the dermatology life quality index was also significantly improved in the intervention group at follow-up: difference of means: unadjusted –0.78, non-parametric test $p=0.003$; adjusted –0.92, –1.48 to –0.37). Self-evaluated severity and skin protective behaviour by hand washings and wearing of protective gloves were also statistically significantly better in the intervention group, whereas this was not the case for knowledge of hand eczema.

A secondary prevention programme for hand eczema improved severity and quality of life and had a positive effect on self-evaluated severity and skin protective behaviour by hand washings and wearing of protective gloves.

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