

Letter to the Editor

Hand dermatitis among nurses: the reasons and consequences

Dear Sir,

We have read with a great interest both studies recently published by Jungbauer et al. (1, 2). The authors paid a special attention to using hand alcohol instead of soap and water when it is sufficient and to wearing protective gloves during the work in wet conditions. Our group has been interested in the problem of hand dermatitis in hospital staff for a few recent years. We are very glad that attempts of introducing additional preventive measures and recommendations have been postulated, as the problem of hand dermatitis among nurses is very common

Recently, we have published a study regarding this problem in our country (3), and we would like to share our experience with other colleagues working in this field, especially that our results are slightly different from that reported by Jungbauer et al. (1). The incidence of self-reported hand dermatitis in the hospital staff (mainly nurses) in our survey was very high. About 70% of respondents declared the presence of symptoms of hand eczema within the last 12 months, and about 46% of the studied group had skin lesions at the moment of self-examination. The symptoms were strictly associated with work, only 3.5% of the respondents claimed that the skin changes had appeared before they started to practise their present professions. About 75% of employees with hand dermatitis observed the worsening of skin problems in relation to work, and 79% reported improvement of skin changes during the leisure time.

These results suggest that the problem of hand dermatitis in nurses is really of great importance. The frequency of hand eczema among nurses in western countries is lower but still very high (up to 41%) (4, 5). The skin lesions may hamper professional duties and may be the reason of prolonged absences. We would also like to emphasize the psychological consequences that affect nurses with hand dermatitis. According to our data (6), 48% of hospital employees with hand eczema declare psychological distress caused by their skin lesions. The patients feel embarrassment or irritability due to the skin changes, which disturbs both social and professional aspects of life. The

level of psychological distress depended on the severity of the disease. Symptoms of hand dermatitis in patients who reported the distress were significantly more severe than in those without psychological problems ($P = 0.0016$). The average number of years in the job was also significantly higher in these subjects ($P = 0.01$).

There are many suggestions regarding the predisposing factors to hand eczema in hospital staff. Several studies showed that use of rubber gloves, detergents, disinfectants or wet work conditions may predispose to hand dermatitis. Modelling the daily irritants exposure, as it was presented by Jungbauer et al. (1), may be one of the ways of proving the predisposing character of the exposure. In our study (3), the influence of none of the above mentioned factors was confirmed statistically. However, to our surprise, the only factor related to the occurrence of hand dermatitis was a personal or family history of atopy. Hand eczema was reported significantly more often in hospital employees with allergic rhinitis ($P < 0.0001$) and people with allergic conjunctivitis ($P < 0.0001$). Skin lesions were also significantly more often present in patients with family history of these diseases ($P < 0.002$ and $P < 0.001$, respectively) and in patients with positive family history of atopic dermatitis ($P = 0.02$). Thus, based on the above described results, we are pointing out the importance of atopy as an additional predisposing factor to hand dermatitis. Unfortunately, this is the factor we cannot influence on. The only preventive measure may be the job counselling and discouragement of people with personal or family history of atopy from jobs which require working in wet conditions and frequent exposure to detergents and disinfectants.

Jacek C. Szepietowski, Joanna Salomon
Department of Dermatology, Venereology and
Allergology, University of Medicine, Wrocław,
Poland

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Address:

Prof Jacek C. Szepietowski, MD, PhD
Department of Dermatology, Venereology and Allergology
University of Medicine
ul. Chalubinskiego 1
50-368 Wrocław
Poland
Tel. + 48 71 7842288
Fax: + 48 71 3270942
e-mail: jszepiet@derm.am.wroc.pl