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## **Hand eczema - severity and medical attendance in relation to prognosis**

### **Summary**

Hand eczema is a frequent disease, often with a chronic course. In the Danish health-care system, a general practitioner is the first medical contact for persons with hand eczema, initiating a first line treatment. To obtain a specific diagnosis and thereby to offer individual information on protective precautions, a dermatological examination is needed. The aims of this thesis were to investigate: (i) the proportion of persons in the background population who have visited a general practitioner because of hand eczema and the proportion who has also been seen by a dermatologist; (ii) changes in clinical severity of hand eczema occurring between the first visit to a dermatologist and follow-up six months later and to identify factors associated with severe disease and a poor prognosis (iii) to analyse the time span from onset of hand eczema until the patient seeks medical advice (patient-delay) and the period from the first consultation with the general practitioner until seeing a dermatologist (health-care delay); and (iiii) to investigate if the delay had any influence on the prognosis. The results of the thesis are based on two separate epidemiological studies. In addition, a study was performed to validate a patient-administrated photographic guide. The photographic guide was used for assessment of severity of hand eczema in the two epidemiological studies.

The first study was designed as a population survey based on a random sample, initially including 6000 individuals. The one-year prevalence of hand eczema was estimated to 14%. In all, 67.4% had visited a general practitioner and 43.6% had seen a dermatologist. Among persons who had never seen a medical doctor, the majority claimed to have experienced mild symptoms only. A considerable number of individuals (35%), who sought medical attention, including those with more significant symptoms, were never referred to a dermatologist. In conclusion, seeking medical attention depended on the clinical severity. A considerable number of individuals who sought medical attention, including those with more severe disease, were never referred to a dermatologist, and this may have consequences for their prognosis.

The main study was a multicentre study and comprised nine dermatology clinics, covering the three main areas of Denmark. In all, 799 patients referred with hand eczema were enrolled, January 2006– February 2007. The study was designed as a follow-up study, where the severity of hand eczema was assessed by a clinical examination at baseline which was repeated after six months. Furthermore the patients assessed the clinical severity using a self-administered photographic guide and supplementary information was collected by questionnaires. At baseline, 60.3% of the patients reported having moderate to very severe hand eczema, 33.1% had only mild symptoms while 6.6% did not have present symptoms. Assessed by the clinical examination, severe hand eczema at baseline was associated with higher age, atopic dermatitis and contact allergy. At the clinical examination performed at the 6-month follow-up, 60.4% had improved. In all, 22.9% reported being clear of hand eczema. Socioeconomic stratification revealed that being unskilled was a predictor of a poor prognosis.

Among individuals who had sought a dermatologist for the first time ever due to hand eczema, the median patient-delay was three months. The median health-care delay was likewise three months. Longer patient delay was associated with a poor prognosis. Health-care delay was not found to be significantly associated with a poor prognosis. However, patients with a health-care delay of more than 12 months seemed to have a poorer prognosis compared with those diagnosed earlier, and the best prognosis was found for individuals with a minimum health-care delay. In conclusion, many patients had symptoms for a relative long period before the dermatology examination, and more prolonged symptoms seemed associated with a poorer prognosis.