Nordic Fellowship Report

Receiving a Nordic Fellowship in Dermatology and Venereology

Marléne Isaksson
Department of Occupational and Environmental Dermatology, University Hospital MAS, SE-205 02 Malmö.

The recipient of the Nordic Fellowship in dermatology and venereology, Marléne Isaksson.

After receiving a Nordic Fellowship in dermatology and venereology, I was given the opportunity to visit the Finnish Institute of Occupational Health (FIOH) for three days in November 2000. The purpose of the visit was to follow the daily activities at the dermatology section and in particular to see how the prick testing and chamber provocation tests were performed.

The Finnish Institute of Occupational Health has 12 departments, the largest of which is the Department of Occupational Medicine, to which the dermatology section, headed by Professor Lasse Kanerva, belongs.

Besides Professor Kanerva, two other dermatologists, Tuula Estlander and Kristiina Alanko, work here, although the latter is currently abroad. In her place, Antti I. Lauerma has been there for three months, and it was so nice to see him, as he was the Opponent at my dissertation last April! There are also two chemists, Riita Jolanki and Katri Kanervo, three nurses, Tuija Halonen, Pia Seelbach and Riika-Liisa Lindberg, one laboratory assistant, Terttu Mäkelä and one secretary, Marianne Pilström.

Dermatology Section, Finnish Institute of Occupational Health, Helsinki, sitting from right: Associate Professor Tuula Estlander (dermatologist), Associate Professor Riita Jolanki (chemist), Professor Lasse Kanerva (dermatologist); standing from right: Terttu Mäkelä (laboratory assistant), Pia Seelbach (nurse), Riikka-Liisa Lindberg (nurse), Associate Professor Antti I. Lauerma (dermatologist), Tuija Halonen (head nurse), Katri Kanervo (chemist). Missing in the picture is Kristiina Alanko (dermatologist), who is currently abroad.

Patients are referred to the clinic from all over Finland. Some 50% are sent for a second opinion from insurance companies and the rest from other doctors, both dermatologists and other specialists, especially from the section of occupational medicine. As the insurance companies pay for the investigations, the tests are free. There is a patient hotel near the clinic for patients coming from distant places, and they stay there during investigations, though not at weekends.

Between 200 and 300 new patients are seen at the clinic each year. Each one is patch-tested and prick-tested. In addition to a standard patch-test series much like the one we use in Sweden, other patch-test series are used, depending on the profession of the patient or the history of the illness. Material from the patient's workplace is also tested, after consideration of the toxicity of the substances. Patients come back after 48 h to have the nurses remove the patches, and the first patch-test reading is done by one of the doctors 15 to 30 min later. A second reading is performed 24 h later and often also additional readings up to 6 or 7 days, depending on which day the patches were first attached to the back. If more test space is needed, not only the back but also the front of the thighs is used to put the test strips on.

The prick-testing is done on the volar parts of both arms, both lower and

Nurse Pia Seelbach performing one of the prick tests on a patient.

upper if necessary, and read after 15 minutes by one of the doctors. A standard series is always performed comprising inhalation allergens and latex, and additional prick-test materials are used when considered necessary. Diverse substances such as foodstuff and dental chemicals like methacrylates, isocyanates, amines and epoxies are tested. Many test substances are diluted in the same vehicle and at the same concentration as in the patch-test series. Prick-testing hand dermatitis patients with inhalation allergens has been a tradition in Finland for many years. One reason is that the diagnosis of atopy is substantiated if positives are found.

The institute has a provocation chamber utilized by the clinic of occupational medicine in investigating patients suspected of having occupational asthma and/or rhinitis. According to Finnish insurance law a connection between the suspected substance and asthma must be shown with probability, and this is the main reason why the provocations are performed. Provocations due to skin symptoms only are never performed. Some 800 to 900 provocations are performed annually and only infrequently do intravenous infusions have to be given because of sudden side-effects. The patients are in-patients during the whole provocation, which may last one week. The substances most commonly used at provocations are formaldehyde and isocyanates, but organic acid anhydrides and moulds, as well as normal work tests like handling and tearing paper and painting with suspected paints, are also performed. The duration of each separate provocation is between 15 and 30 min. The provocation study always starts with a histamine test, followed one or two days later by either a placebo test or the actual chemical/work materials or specific allergen extracts, or vice versa. The lung function is monitored, with peak expiratory flow rate measurements taken before each provocation, after 7 min and at the end of the provocation as well as up to 24 h after the provocation at different intervals. A reduction of 15% or more from the baseline value is considered a positive test. Any dermatological complaints or skin lesions during provocation are attended to by one of the dermatologists.

FIOH also has a lab in Turku, where the content of different products can be investigated. When I visited the clinic, a machinist with suspected work-related hand dermatitis was under investigation. At patch testing he reacted to ethanolamine and diethanolamine, chemicals often present in cutting fluids. However, he did not react to his own cutting fluid diluted at an appropriate concentration for patch testing, so to find out whether the chemicals he reacted to were present in the cutting fluid, a sample was sent to the lab in Turku.

During 1999, 2 244 doctor's visits took place, 2 185 epicutaneous test series and 2 633 prick-test series were handled, and 34 skin provocations with patients' own work-related gloves and flours were made.

My visit to FIOH was not only very pleasant but also worthwhile, since I received many new ideas to bring back to my own clinic, which is the Department of Occupational and Environmental Dermatology in Malmö, Sweden. All the staff at the dermatology section at FIOH were very friendly and took good care of me. I encourage anyone who wishes to visit another Nordic clinic and learn something new to apply for a Nordic Fellowship.