

Dermatological Research at The Dermatology Clinic Vesterbro, Aalborg

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Aalborg is the 4th largest city in Denmark. In 1925 a private practise of dermatology was established in Aalborg by dermatologist Dorff Kjeldsen. He also supervised dermatology patients admitted to two Catholic hospitals in the city. In-patients services at these hospitals were discontinued in 1967. Since then, dermatology service in the city has been provided by dermatologists in private practice.

The Dermatology Clinic located at Vesterbro in Aalborg, Denmark is a private practice of dermatology. It is owned by 3 dermatologists and a total of 17 persons, including a part-time dermatologist, work in the clinic. There is a long tradition of clinical research in the clinic.

Systemic contact dermatitis

Previously most of this research was on contact dermatitis, in particular, systemic contact dermatitis. This research has, among other things, shown that contact dermatitis caused by the metals nickel, cobalt and chromium and balsam of Peru are clinical entities. The results of this research have been communicated in articles in international, peer-reviewed journals and in a doctoral thesis by Niels K. Veien.

Allergic contact dermatitis caused by antibiotics used to treat pigs has been described as well as contact allergy caused by aluminium in childhood vaccinations and in vaccines used for hyposensitization of patients with allergy to pollen, animal dander and house-dust mites. In recent years, much of the research in contact dermatitis has been carried out in collaboration with the National Allergy Research Centre at Gentofte Hospital with emphasis on various aspects of hand eczema. This collaboration has made it possible for physicians in the clinic to recruit patients for clinical studies and to provide guidance for several PhD projects. A randomised study of the treatment of hand eczema has shown that many cases of hand eczema can be adequately controlled by the intermittent use of a potent, topical corticosteroid.



The staff at The Dermatology Clinic Vesterbro, Aalborg.

Propionibacterium acnes and acne

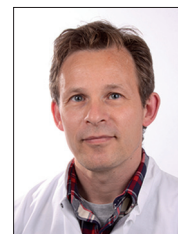
For the last five years, *Propionibacterium acnes* and its role in the pathogenesis of acne vulgaris has been a main area of interest for Hans B. Lomholt. A number of studies have been conducted in collaboration with professors Mogens Kilian and Holger Brüggemann at the Department of Biomedicine, University of Aarhus, where Hans B. Lomholt works as a part time associate professor.

The population structure of *P. acnes* has been studied in detail, and a new reference multilocus sequence typing scheme was developed. Use of this scheme showed that a subpopulation of the species is associated with moderate to severe acne, while other lineages are associated with opportunistic infections and healthy carriage. Interestingly, a single epidemic clone, significantly associated with acne, appears to be widespread throughout the world. Ongoing studies further detail the relation of genetic lineages to acne, the relation of antibiotic resistance to potentially virulent lineages and the colonization dynamics over time in individuals.

Molecular studies are now initiated to reveal differences between virulent and non-virulent clonal lineages and their interaction with host cells. A part of these studies is in co-operation with The Department of Dermatology at Aarhus University Hospital. The hope is to define virulence factors of the bacteria that are crucial for the development of acne, thereby providing a basis for the development of targeted, more efficient new treatments for this widespread disease.

Non-melanoma skin cancer

A third area of interest is non-melanoma skin cancer. Henrik Sølvsten has participated in the development of a national quality database to register all cases of non-melanoma skin cancer diagnosed and treated in private practices of dermatology throughout Denmark. The database will serve as an instrument for improving the quality of care of patients with non-melanoma skin cancer as well as a basis for clinical research. Data from the database have already been utilised in a PhD dissertation.



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