

EDITORIAL

The multifaceted face of Acta Dermato-Venereologica

It is the general policy of *Acta Dermato-Venereologica* to publish papers covering a broad spectrum of topics, extending from basic science in skin biology to venereology and clinical dermatology. The policy is nicely illustrated in this issue in several interesting papers, some of which are highlighted below.

The clinically important issue of how to investigate patients with suspected adverse reactions to systemic drugs is discussed by Hein et al. on page 139. Their findings have to be viewed against the background that good *in vitro* tests for adverse drug reactions are virtually non-existent and that the overall understanding of the pathophysiology of adverse reactions has been moving ahead very slowly over the past 20 years. Researchers from Charité Virchow Clinic in Berlin have examined the outcome of systemic provocation tests in 56 patients with suspected immediate-type allergic or pseudo-allergic reactions to non-steroidal anti-inflammatory drugs, antibiotics and local anaesthetics. Prick or intradermal skin tests were positive in only 4 patients. Furthermore, only 4 of 26 patients tested systemically with the suspected drug again developed allergic symptoms varying in intensity from rash to anaphylactic reactions. However, several patients developed allergic-like symptoms also when tested with placebo. For safety reasons, challenge with alternative drugs was made in 30 patients, showing that most of them were tolerant to these medications. The authors conclude that while the frequency of positive test reactions is low there is great practical value in performing systemic provocations with alternative drugs – when such compounds are available – although this does not establish whether or not the primary reaction was truly or falsely allergic.

Another common clinical problem discussed in this issue is the treatment of chronic venous leg ulcers. There is still a great deal of controversy about the pathophysiology of chronic venous ulcers and about the role played by abnormal microcirculation. Some investigators believe that increased peripheral resistance of leg arteries is a *sine qua non* for developing such ulcers. A Finnish group headed by V. Havu discusses in this issue (p. 156) the role of low resistance blood flow pathways in the pathogenesis and healing of venous leg ulcers. Investigating peripheral resistance and arterial blood flow using Doppler techniques after a single pneumatic compression treatment of 8 patients with venous ulcers and 10 healthy controls, they found that compression raised the peripheral resistance in the arteries of legs with ulcer and laser Doppler flux of the skin more in

ulcer legs than in healthy legs. This, according to the authors, suggests that arteriovenous shunting is a dynamic phenomenon dependent on the degree of venous stasis in the leg and that can be affected by removing leg oedema even with a single intermittent compression treatment.

A conundrum in immuno-dermatology is the lack of correlation between circulating levels of IgG auto-antibodies and disease activity in bullous pemphigoid. Clearly, animal experiments show that injection of IgG directed against BPA antigen, the disease-specific epitope on the hemidesmosome, elicits blister formation in the skin. A research group from Oxford, led by F. Wojnarowska, addresses the question from another angle (p. 127): Does the response to steroid treatment depend on a switch of IgG from one subclass to another? The background is that different IgG subclasses have different proinflammatory activity. IgG1-3 are proinflammatory and fix complements by the classical pathway, whereas IgG4 lacks this property and acts as blocking antibody. The authors show in patients responding to therapy that there is indeed a switch from IgG1 to IgG4 autoantibodies in the circulation, which fits with the hypothesized mechanism of action of immunosuppressants. However, although autoantibodies are most probably directly involved in the pathogenesis of bullous pemphigoid, other circulating factors are also important co-activators. Thus, in a forthcoming issue of *Acta Dermato-Venereologica* Katsuno et al. (in press) show that successful plasmapheresis of pemphigoid induces a marked reduction in IL-6 rather than a lowering of the titre of circulating autoantibodies.

Trichohyalin is a differentiation-related protein which is mainly found in the hair follicle and is normally absent in adult epidermis. Like involucrin and filaggrin, it is involved in the formation of the cornified cell envelope and in the cross-linking of proteins. In this issue (p. 122), a South-Korean group headed by S-C Lee investigates the function of trichohyalin during terminal differentiation of the skin, using immunohistochemistry examination of skin biopsies from a wide variety of disorders, ranging from psoriasis and ichthyosis to benign and malignant skin tumours. From comparative studies with filaggrin and involucrin, trichohyalin co-expression was found in several types of tumours. The authors conclude that trichohyalin is weakly and variably expressed in many epidermal disorders and that it has a close functional relationship with other markers of terminal differentiation as a precursor of the cornified cell envelope of the skin.

Anders Vahlquist, Editor-in-Chief