ABSTRACT

Enhanced Serological Reactivity of Psoriatic Patients with Keratinocyte Proteins Is Partly due to Crossreactivities with Streptococcal Antigens

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Serological cross-reactivities between streptococci and keratinocytes have been suggested to contribute to the pathogenesis of psoriasis vulgaris. Therefore we have analysed by immunoblotting the reactivity of sera from psoriatic patients (PP) and healthy individuals, using lysates of human keratinocytes (KC), EBV-transformed B-cell lines (BCL) and lysates of group A streptococci (ST), strains M1 and M12. When compared with the control group, sera from PP reacted more strongly with lysates of KC and ST. Here, a broad range of proteins of varying molecular size were detected. No additional reactivities could be induced by heat shock treatment (45°C, 2 h) of KC. Following preincubation of patient sera with sonicated ST, the intensity of several bands was decreased in the KC- and ST-, but not in BCL-lanes. Thus, cross-reactivities with ST antigens apparently contribute to the enhanced serological reactivity of PP with KC proteins. Although autoantibodies are most likely not involved in the generation of inflammatory psoriatic skin lesions, their presence suggests an enhanced cellular immune response to ST which, on the level of T lymphocytes, could very well be involved in the pathogenesis of psoriasis vulgaris. This work was supported by SFB 217 and Wilhelm-Sander-Stiftung, grant 92.032.1.