ERYTHEMA FIXUM - ATTEMPT TO EVALUATE THE IMMUNE CHARACTER OF THE DISEASE (WITH ONE CASE CONTRIBUTION)

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Allergic skin reactions due to drugs are known to display many varieties of lesions that enable recognition of several clinical forms: Erythema multiforme, Erythema nodosum, Urticaria, Urticaria-Vasculitis, Dermatitis medicamentosa allergica lichenoides and Erythema fixum. Erythema fixum, known also as Fixed drug eruption (FDE) represents a particular interest based on clinical and immunologic grounds. M.H.F., a 44 year old female with rheumatoid arthritis is treated with Benzacillin compositum (BC). Then an erythema developed at the site of application associated with mild pruritus and followed by pigmentation. Examination revealed eruption located on the external upper parts of the gluteus. On the left side it appears as an erythematous, ovale plaque, marginated by hyperpigmentation (last injection), and on the right side as a hyperpigmented macule with erythematous center (last but one injection) (Fig. 1). Blood samples were within normal ranges. Scarification tests with BC and four more semi-synthetic Penicilline preparations showed negative results. Tests with Analgin, Novocain and Tetracycline proved also negative. Histologic study revealed normal epidermis except for several dyskeratotic keratinocytes scattered in different levels and that finding provided grounds to use the term "sporadic" dyskeratosis.

The nuclei of these cells are enlarged and darkly stained (Fig.
2). Infiltration quite thick with lymphoid-histiocytic cells, solitary fibroblasts and fibrocytes is observed around the vessels in medium dermis. Medium size vessels have flattened lumen, indirect evidence for dermal edema (Fig. 2). FDE manifests with the same lesions appearing at the same place in the same person after administration of the same drug. All is fixed. Considering the character of the eruption several forms of the disease are described: erythemo-edemic, bullous, scaly and even crust form. In the case of M.H.F. an erythemo-edemic form is observed but because of overlap of relapses concentric pigmented macules are developed.

Pigmentation is due to hydropic degeneration of basal cells resulting in incontinentio pigmenti and its accumulation in the melanophores. FDE results after oral or parenteral drug administration. More than 50 drugs, preservatives and chemical agents (azo-dyes) are shown to serve as etiologic factors. Patch testing out of lesion area proves negative but scarification tests with the particular allergen (antigen) on the same place positive results. In this case each new injection with BC serves as a prototype of this skin reaction-prick test (lumen of the injection needle is filled with the drug). The lesions of FDE can be solitary or several, to affect the oral and genital mucous membranes but are rarely symmetrical. With regard to the fixed eruption two possibilities are considered: 1) accumulation of immunocompetent cells which react with the antigen and 2) local enzyme shortage. The appearance of lesions at the place of allergen injection (BC-hapten) in 72 h in our case is considered to be a peculiar jatrogenic experiment for FDE classification as a delayed type (tuberculin) allergic reaction. We conclude that symmetrical lesions can be observed in FDE; our case suggests an jatrogenic prove for FDE being a classical example for a delayed, cell-mediated type allergic reaction, and here an immune duplex is observed: FDE and rheumatoid arthritis (autoallergic disease with delayed (tuberculin-type) allergic reaction.