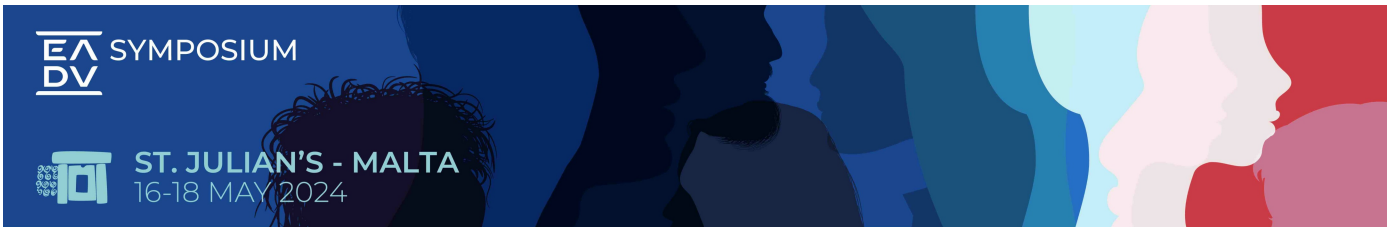

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Immune complex character pathogenesis of psoriatic disease

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Introduction & Objectives: The effect of changes in cytokine profile is admitted to be an integral pathogenic mechanism of psoriasis. In this case, we believe that it makes sense to study the levels IL-4, IL-10, IL-8 and TNFα. The first two have an anti-inflammatory effect. IL-4 suppresses cytokine synthesis and shows an apparent antiproliferative potential. IL-10 also does some inhibitory activity towards cytokines, but at the same time it is an immunosuppressive agent. IL-8 belongs to the main chemokines. TNFα is a part of a group of anti-inflammatory cytokines and shows cytolitic and antineoplastic effects.

Endocrine disorders hold the leading position in pathogenesis of psoriasis. In particular, there has been observed lately an increase in the level of thyreopaties, which is considered to beconnected with environmental deterioration. Thyroiddisorders, associated with both its suppression and functional improvement are characterized with the appearance of autoimmune reactions, and circulatory antibodies to thyroglobulin (Tg). In this aspect, we consider it to be prospective, to examine the antibodies to thyroidperoxidase (TPO) and Tg in the patients with psoriasis.

Materials & Methods: The study group consisted of 42 patients with psoriasis (24 men and 18 women) aged 19 to 68 years. The disease duration ranged from 6 months to 21 years. The progressive psoriasis was stated in 31 patients, and stationary one – 11. Formed the control group 18 healthy subjects of comparable age and sex. The levels of IL-4, IL-8, IL-10, TNFα and autoantibodies to thyroid peroxidase (TPO) and thyroglobulin (Tg) were determined.

Results: Unidirectional nature of the cytokine changes, owning different spectrum was discovered, indicating the accent and systemic immunological disorders in psoriasis and their dependence on the clinical course characterizes some specificity of the violations. In order to further investigation of revealed immunological changes we studied the contents of autoantibodies to TPO and Tg. The accented dependence content of autoantibodies to TPO and Tg on the clinical course of psoriasis prompted us to consider the correlation relationship between it and cytokine activity, resulting into a recorded close relationship between the content of cytokines and autoantibodies to Tg.

Conclusion: 1. As a result of the study, it is shown that the increase in blood IL-4, IL-8, IL-10 and TNFα and changing levels of autoantibodies to TPO, Tg, reflecting a associativity with the clinical course of psoriasis, and is most accentuated in the presence of erythroderma, arthropathy and progressive stage dermatosis.

\2. The close correlation between the content of the association of cytokines and autoantibodies to content TPO and Tg, which ranges from r = +0,27 to r = +0,79, shows the concordance of immunological disorders and confirms the assumptions regarding, immune complex character pathogenesis of psoriatic disease.