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Characteristic features of microbial flora in patients with psoriasis

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Introduction & Objectives: Characteristic changes in the macroorganism state are reflected in the disorders of microbial landscape of all topographical skin zones. It should be noted that the study of the skin microbial landscape in patients with psoriasis have episodic and unstructured nature. Thus, it is claimed that the findings of the skin microbiocoenosis disorder in patients with psoriasis are characterized by changes in the quantitative and qualitative spectrum of microorganisms, in particular, by the appearance of *Staphylococcus haemolyticus* in the foci, probable increase in the number of *Corynebacterium spp., Micrococcus spp., Staphylococcus hominis, Staphylococcus capitis*, *Staphylococcus aureus* on the background of an oppression or a significant increase in the colonization of *Staphylococcus epidermidis*. *The purpose* of our work was to investigate the quantitative composition of microscopic flora and the degree of skin induration of patients with psoriasis, depending on the clinical course (clinical form, stage) and duration of the disease.

Materials & Methods: The study of the skin microscopic flora was performed from the lesions in 37 patients with psoriasis, which were under observation. 28 apparently healthy persons formed the control group. The material was taken using a replica plating method with subsequent microbiological identification of microorganisms.

Results: It has been established that patients with psoriasis, which were under observation, had the skin microbial landscape of the lesions formed mainly of *S. aureus, S. epidermidis, S. saprophyticus, Bacillus and Micrococcus genera.* The clearest microbial contamination of the lesions has been observed in psoriatic erythroderma, slightly less accentuated skin microbial contamination has been found in patients with the widespread form of dermatitis and the presence of arthropathy, and the least number of microorganisms have been found in patients with common psoriasis without complicated phenomena. The progressive stage of psoriasis has been characterized by a higher level of microbial contamination. It has been established that patients with psoriasis have a very significant dependence of contamination degree of *S.aureus, S.epidermidis and S.saprophyticus* from the duration of dermatitis course, the growth of which had contributed to the intensification of microbial contamination. Thus, the highest level of microbial contamination have been observed in patients with erythroderma, progressive stage of the pathological progress and duration of the disease for more than 20 years.

Conclusion: Analyzing the obtained results, we observed a tendency that *Staphylococcus aureus* and *Staphylococcus epidermidis* are the dominant components of the skin microbial landscape of lesions in patients with psoriasis, which allows us to consider them as trigger factors of the pathological process.