

COMPARATIVE ANALYSIS OF SKIN MICROBIOCENOSIS OF PATIENTS WITH ATOPIC DERMATITIS AND PSORIASIS

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According to WHO the frequency of Atopic dermatitis (AD) makes up 2 - 5%, psoriasis - up to 11.4%. The change of skin barrier properties in AD leads to impoverishment of the specific composition of commensals as well as colonization of *Staphylococcus aureus*. As of now, the role of microorganisms in pathogenesis of psoriasis has not been studied completely.

Purpose of the research: a comparative study of the microbiocenosis state of patients' skin lesions in psoriasis and AD.

The study included 100 patients hospitalized in the Department of Dermatology in the GA "Institute of Dermatology and Venereology, NAMS of Ukraine" in 2017-2021. The group of AD patients consisted of 34 people (average age 28.5 ± 1.9), the group with psoriasis included 66 people (average age 43.1 ± 2.8). The methods of classical bacteriology were applied for the study of bacteriological material from the patients' affected skin.

In the group of AD patients, 55 bacterial strains were isolated that were attributed to 4 genera: *Staphylococcus*, *Micrococcus*, *Streptococcus* and *Corynebacterium* (87.3%, 5.7%, 1.9% and 1.9%, respectively). Among the staphylococci *S. aureus* (41.7%), *S. epidermidis* (25.0%), *S. haemolyticus* (20.8%) were dominating, the share of other species made up 12.5%. Particular attention is being drawn to the identification of associations of *S. aureus* with CN (catalase-negative) *Staphylococcus* spp. (20.6%).

During the study of skin lesion microbiocenoses in patients with psoriasis, 109 bacterial strains were isolated and attributed to 5 genera: *Staphylococcus*, *Micrococcus*, *Corynebacterium*, *Streptococcus* and *Klebsiella* (82.6%, 13.8%, 1.8%, 1.0% and 1.0%, respectively). As in patients with AD the dominant position was held by representatives of the genus *Staphylococcus*: *S. haemolyticus* (22.9%), *S. epidermidis* (15.6%) and *S. cohnii* (11.1%) while a share *S. aureus* accounted for 8.3%. As in AD patients in this group of patients the associations were found – 54.5%. In general associations of the CN *Staphylococcus* spp. were observed among themselves – at the level of 79.0%, the associations of *S. aureus* with CN *Staphylococcus* spp. – 21.5%.

As a result of the studies of microbiocenoses of skin lesions, microorganisms of the genus *Staphylococcus* were found to be a dominant group in both AD and psoriasis. In the case of AD a high percentage of *S. aureus* detection indicates a significant influence of the microorganism on both maintaining of inflammatory process in skin and aggravating the course of dermatosis.