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IMMUNOLOGICAL ASPECTS IN THE STRUCTURE OF RHEUMATOLOGICAL KNOWLEDGE AT THE STAGE OF POSTGRADUATE EDUCATION

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Introductions. Teaching rheumatological issues in the cycles of thematic improvement for doctors, knowledge of clinical immunology is becoming increasingly important for understanding the targets of biological therapy and its justified choice.

Systemic connective tissue diseases (SCTD) have played a key role in the study of immune disorders, and immunological methods of laboratory diagnostics are widely introduced into clinical practice. That is why, new challenges arise for teachers of postgraduate medical education that require a structured approach.

The range of rheumatological diseases is associated with a wide range of various autoantibodies, which are of diagnostic importance for confirming the nosological form of the disease and determining the prognosis.

Aim. Improving the effectiveness of the strategy for teaching rheumatology issues based on immunological knowledge.

Main part. In rheumatological practice, autoantibodies are used for the purpose of differential diagnosis of SCTD, while factors of cellular immunity are used to assess the dynamics of inflammation and control immunotropic therapy.

It remains important for clinical practice to exclude infectious processes in patients with rheumatological pathology that worsen the course of the underlying disease or predispose the doctor to erroneous treatment decisions.

In recent years, the understanding of the clinical significance of assessing the value of the immunoregulatory index has changed. The level of the immunoregulatory index is assessed in comparison with the phase of the immune response. Assessment of the etiology of the inflammatory process is also important. Thus, if, according to clinical signs or PCR data, the patient has a viral infection, and the immunogram indicators correspond mainly to the humoral pathway of the immune response (enhanced phagocytosis, prolonged neutrophilic phase, a sharp increase in the levels of B lymphocytes and antibodies with relatively low values of T cells), then this may be an indication for immunocorrective therapy.

When interpreting the results of the immunogram, a dissociation syndrome is established – a discrepancy between the direction of changes in interconnected

immunological indicators. The value of the dissociation syndrome is that the latter can indicate hidden immune defects (for example, existing only at the functional level). Dissociation syndrome is a typical finding in a patient with a defect in the immune response. A typical example of dissociation is the fact of an increase in the level of specific antiviral antibodies against the background of increasing indicators of quantitative PCR, which, as is known, determines the content of viral nucleic acid. Theoretically, an increase in the level of specific antibodies should lead to a decrease in virus replication, however, in conditions, for example, of impaired phagocytosis, proper antigen presentation does not occur, which can lead to the formation of insufficiently specific antibodies to this strain of the virus.

When interpreting cytokine profile data, the doctor adheres to the following principles. First, not each indicator is evaluated separately, but a group of indicators. It is considered advisable to evaluate the results obtained in the context of the expected phase of the acute inflammatory response. When interpreting the results of cytokine profile indicators, the etiological factor determined by clinical signs, PCR results, microbiological methods and cytokine targets are taken into account. Given the rapid pace of development of the pharmacological industry, especially biological therapy, clinical practice has changed dramatically, which is what attracted the attention of rheumatologists to fundamental knowledge on immunology and mechanisms of action of biological drugs. It should be noted that in many European countries, courses in immunology have been developed specifically for rheumatological practice.

Conclusions. The introduction of immunological knowledge into the process of teaching rheumatology issues is of great importance, especially at the stage of postgraduate education, which contributes to the improvement of the specialist's qualifications and the development of a full-fledged, comprehensively developed personality of the doctor.

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