monitoring and documenting clinical progress. Although the small sample size limits statistical generalization, detailed analysis of individual trajectories provides valuable insights into real-world physiotherapy practice, underscoring the importance of comprehensive, patient-specific care in everyday clinical settings.

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IMMUNOREGULATORY INDEX CD4+/CD8+ IN PERSONS AGE 18-20 UNDER MARTIAL LAW

Sokolenko V. L., Sokolenko S. V.

Bohdan Khmelnytsky National University of Cherkasy
E-mail: sokolenko@ukr.net

The immunoregulatory index CD4+/CD8+ is an important indicator of the integrative activity of the immune system. A change in this ratio in favor of cells with the CD8+ phenotype is considered one of the characteristics of the immune risk phenotype (IMP), as a manifestation of immune aging of the body [1]. We observed such an effect in students who came to study from territories contaminated with radionuclides as a result of the Chornobyl accident, especially during the period of increased emotional stress caused by the examination session [2]. At this time, students, like the rest of the population of Ukraine, are experiencing chronic stress due to a full-scale war and martial law factors.

We analyzed the indicators of peripheral blood T-lymphocytes with CD4+ and CD8+ phenotypes in 2nd-3rd year students in 2024 and 2025. Peripheral blood was collected by professional doctors at the Cherkasy Central District Hospital. The subjects gave their consent to participate in the research and to publish the results. The relative number of lymphocytes was determined on the basis of a blood smear stained according to Pappenheim. Immunophenotyping was performed using erythrocyte diagnostic agents to identify lymphocyte subpopulations (GRANUM, Ukraine).

It was found that in individuals aged 18-20 years, who studied in various specialties of Bohdan Khmelnytsky National University of Cherkasy, there were cases of the relative number of lymphocytes exceeding both the upper and lower limits of reference values. At the

same time, in almost all subjects, the immunoregulatory index CD4+/CD8+ was shifted to the lower limit of the norm. A decrease in the relative number of lymphocytes and the immunoregulatory index is a typical sign of chronic stress [3, 4]. Given the absence of direct hostilities, this stress may be due to emotional factors of martial law in Ukraine. It is advisable to consider individual cases of an increase in the relative number of lymphocytes as a sign of chronicity and development of distress. Considering the parallel decrease in the immunoregulatory index CD4+/CD8+ in such individuals, there are reasons to consider the identified features as signs of a violation of the adaptive capabilities of the integrative immune response.

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