FACTORS AFFECTING THE LEVEL OF RHEUMATOID FACTOR AS AN INDICATOR OF INFLAMMATORY PROCESSES ACTIVATION

The state of health of the Ukrainian population has been a matter of concern since the Chornobyl accident in 1986 [1-3]. Chronic exposure to low doses of radiation can be compounded by other factors, causing an allostatic load effect [4, 5]. Ukraine, like the rest of the world, has experienced the COVID-19 pandemic and has been at war since February 2022. This has led to an increase in cases of psychological distress among the population [6]. Experts believe that war-related psychological trauma can cause long-term changes in mental well-being, mental health disorders such as post-traumatic stress, depression, and distress in adults and children. Factors underlying patterns of stress in wartime include both the direct impact of trauma and psychosocial stressors, such as financial loss. Emotional suffering associated with war occurs not only through direct exposure but also indirectly (watching war scenes on television or social media, etc.) [7].

Many studies have demonstrated a link between depression and rheumatoid arthritis activity at the level of proinflammatory cytokines [8]. In recent years, a lot of new data has emerged on the possible association of lifestyle factors with rheumatoid arthritis. This, in particular, applies to socioeconomic status: its low level increases the likelihood of developing inflammatory processes [9]. The activity of the nervous system is closely related to the activity of the immune system [10]. Chronic psychosocial stress is discussed as one of the possible factors influencing the development of chronic diseases, as it affects the immune system through the corticotropic axis [11]. Numerous studies have shown that the development of rheumatoid arthritis is preceded by a certain preclinical period. At this time, complex interactions between the environment and genetic causes occur. Early intervention in the development of the pathology contributes to less joint damage and an increased likelihood of achieving remission [12]. This has led to the relevance of our research.

We analysed the indicators of the rheumatoid factor, as an important diagnostic criterion, in men and women of different age groups in 2018, 2020 and 2022. The subjects consulted a family doctor with certain symptoms of rheumatoid processes and were referred for appropriate analysis to the Department of Clinical Laboratory Diagnostics of the Korsun-Shevchenkivska...
Multidisciplinary Hospital. The years for our analysis were selected based on the following criteria: 2018 – the period before the COVID-19 pandemic; 2020 – the year when the pro-inflammatory phenomena could have been affected by the pandemic and quarantine restrictions; 2022 – the year when the indicators could have been affected by the factors of martial law in Ukraine.

According to the age factor, the subjects were divided into two subgroups: under 50 and over 50.

In all cases, except for men under the age of 50, in 2018, the level of rheumatoid factor exceeded the reference value (<8 IU/L) by average. No significant difference was found between men and women, regardless of age and year of study. The mean values were higher in males. No significant difference was found between the scores in different age groups (within the same sex). There is a tendency for the average value to increase with age. However, in women, according to 2022 data, this trend was not observed, which may indicate a certain mobilisation of pro-inflammatory processes in younger people. The impact of martial law on the mobilisation of proinflammatory phenomena may be confirmed by the tendency to increase the level of rheumatoid factor in men under 50 years of age in 2022 compared to 2018.

**Conclusions:** Thus, there are certain signs of modulation of proinflammatory phenomena caused by martial law in Ukraine, which are especially pronounced in men.

**References:**