

EFFECT OF PREVIOUS CORONAVIRUS INFECTION ON CLINICAL AND FUNCTIONAL PARAMETERS IN PATIENTS WITH ANKYLOSING SPONDYLOARTHRITIS

Rakhimova M.B., Akhmedov Kh.S., Khalmartova F.I.

Tashkent medical academy

Introduction. It has now been established that the new coronavirus infection worsens the course of many autoimmune systemic diseases, including ankylosing spondyloarthritis (AS), which adversely affects both the course and outcome of the disease, leading to early disability. In this regard, it becomes necessary to study the characteristics of the course of AS and predict the outcome of the disease in patients with previous COVID-19.

Materials and methods. The study involved 100 patients with an established diagnosis of ankylosing spondyloarthritis. Patients were divided into 2 groups according to the results of tests for the previous coronavirus infection: the main group was 40 patients with AS and a COVID-19 infection, the average age of which was 52.3 ± 1.2 years, of which 31 were men and 9 were women, the control group was 60 patients with AS and did not tolerate COVID-19, the average age of which was 57.5 ± 1.7 years, of which 49 were men and 11 women. The diagnosis of ankylosing spondyloarthritis was established on the basis of AS criteria. The confirmed COVID-19 infection was the results of blood tests obtained by enzyme-linked immunoassay (ELISA), as well as a sample of swabs from the throat and nasopharynx, investigated by polymerase chain reaction (PCR). All patients were evaluated for clinical status, disease activity according to the Lansburi index, VAS pain scale, BASDAI, BASFI, ASDAS questionnaires, as well as X-ray examination of pelvic bones, peripheral joints, and inflammatory markers were identified as C-reactive protein, ESR, circulating immune complexes (small).

Results. A comparative analysis of the results of both groups showed that high disease activity was observed in the main group and was established in 96% of patients, the indicators of the Lansburi indices, BASDAI, BASFI, ASDAS and VAS

scales were 41.2 ± 1.6 , 8.2 ± 0.6 , 7.4 ± 0.5 , 4.2 ± 0.9 , 7.2 ± 0.4 , respectively. High ESR 57.3 ± 2.1 (mm/h) and C- reactive protein 46.3 ± 1.1 (mg/L), signs of sacroileit, enthesitis were detected in 76% of patients in the main group. While at patients of control group low indicators of the Lansburi index, scales of BASDAI, BASFI, ASDAS and VAS - 19.1 ± 0.9 , 4.3 ± 0.2 , 3.1 ± 0.8 , 2.1 ± 0.7 , 5.1 ± 0.4 ($p < 0.05$) respectively, indicators of SOE and S - reactive protein - 17.2 ± 1.9 (mm/h) and 11.3 ± 0.9 (mg/l) respectively were noted. In 46% of patients in the control group, two-sided sacroileitis was detected, as well as expansion of the joint gaps in 28%. The CEC (small) indicators of the main group exceeded the control indicators by almost 2 times $58,3 \pm 1,3$ e.d. and $30,3 \pm 1,6$ e.d. ($p < 0.05$), respectively, which confirms the high activity of the inflammatory process in patients with AS who have undergone COVID-19.

Conclusion. Coronavirus infection has a direct trigger effect on the autoimmune mechanisms that underlie the development of ankylosing spondyloarthritis. Direct negative impact is confirmed by an increase in the activity of inflammatory markers, high indices and scales of disease activity and impaired functional activity. Thus, patients with AS and suffered COVID-19 are of particular interest due to the deterioration of the course of the underlying disease and the high risk of early disability development.