

THE ROLE OF CORONAVIRUS INFECTION (COVID-19) IN THE DEVELOPMENT OF SYSTEMIC VASCULITIS

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Annotation. The scientific article presents data on the effect of coronavirus infection on the development of systemic vasculitis. The study of options for clinical trials of systemic vasculitis in patients with coronavirus infection necessarily necessitates the use of alternative treatment tactics in time for this disease, and as a result, complications of the disease are prevented, and in patients with a complicated or chronic form of the disease, the transition of the disease in a mild form and a significant decrease in This assesses how significant medicamentous therapy is. The Prevention of risk factors, analysis of the clinical course of systemic vasculitis and changes in laboratory-instrumental examinations serve to identify the disease in time, reduce the risk of its complications for a while, and bring the lethality rate to a minimum. The results of scientific research are recommended for use in the activities of doctors. The results obtained are recommended for use in the process of teaching students of medical institutes.

Keywords: systemic vasculitis, covid-19 infection, nodular erythema, necrotic vasculitis, polyangiitic granulomatosis, immunocomplex.

Аннотация. В научной статье представлены данные о влиянии коронавирусной инфекции на развитие системных васкулитов. Изучение вариантов клинических испытаний системного васкулита у пациентов с коронавирусной инфекцией обязательно обуславливает необходимость своевременного применения альтернативной тактики лечения этого заболевания, и в результате предотвращаются осложнения заболевания, а у пациентов с осложненной или хронической формой заболевания - переход заболевания в легкая форма и значительное снижение этого показателя позволяют оценить, насколько значима медикаментозная терапия. Профилактика факторов риска, анализ клинического течения системного васкулита и изменений в лабораторно-инструментальных обследованиях служат своевременному выявлению заболевания, на некоторое время снижают риск его осложнений и сводят летальность к минимуму. Результаты научных исследований рекомендуются для использования в деятельности врачей. Полученные результаты рекомендуются для использования в процессе обучения студентов медицинских институтов.

Ключевые слова: системный васкулит, инфекция covid-19, узелковая эритема, некротический васкулит, полиангиитический гранулематоз, иммунокомплекс.

Annotatsiya. Ilmiy maqolada tizimli vaskulitlar rivojlanishiga Koronavirus infeksiyasining ta'siri haqida ma'lumotlar keltirilgan.

Koronavirus infeksiyasi bilan kasallangan bemorlarda tizimli vaskulitlar klinik kechish variantlarini o'rganish albatta mazkur kasallikka vaqtida muqim davo taktikasi qo'llanilishini taqozo etadi va buning natijasida kasallikning asoratlari avj olishi oldi olinadi hamda kasallikning asoratlanagan yoki surunkali shaklida bo'lgan bemorlarda kasallik yengil shaklda o'tishiga va letallik ko'rsatkichi sezilarli darajada pasayishiga zamin yaratadi. Bunda medikamentoz terapiyaning qanchalik ahamiyatli ekanligi baholanadi. Xavf omillarning oldini olish, tizimli vaskulitlar klinik kechishini hamda laborator-instrumental tekshiruvlar o'zgarishini tahlil qilish mazkur kasallikni vaqtida aniqlash, uning asoratlanish xavfini bir muncha kamaytiradi hamda letallik ko'rsatkichini minimal darajaga olib kelishga xizmat qiladi. Ilmiy izlanish natijalari shifokorlar faoliyatida foydalanishga tadbiq etish uchun tavsiya qilinadi. Olingan natijalar tibbiyot institutlari talabalarini o'qitish jarayonida foydalanishga tavsiya etiladi.

Kalit so'zlar: tizimli vaskulit, covid-19 infeksiyasi, tugunli eritema, nekrotik vaskulit, poliangiitli granulematoz, immunokompleks.

Introduction. Systemic vasculitis (SV) is a group of heterogeneous diseases, the main morphological feature of which is inflammation of the vascular wall, the clinical manifestations of which are determined by the type of vascular walls, caliber, localization and severity of immuno - inflammatory changes.

SV is one of the most severe forms of chronic human pathology. SV prevalence ranges from 0.4 to 14 or more cases per 100,000 inhabitants. According to epidemiological studies, the trend of increased SV prevalence has been evident. Depending on the nosological form, SV occurs at different frequencies in men (often nodular polyarthritis) and women (often Takayasu aortarteritis, giant cell arthriitis) and can develop at any age. The etiology of most major systemic vasculitis is not known. In some forms of SV, they can be clearly linked to certain causal (excitatory) factors such as hepatitis B, S viruses, bacterial infection (streptococci, Iersinia, Chlamydia, etc.), as well as hypersensitivity to drugs and tobacco components. The role of genetic factors in the development of some SV has been reliably proven.

The effect of coronavirus infection on systemic vasculitis has not been sufficiently studied, there is no clear data in the scientific literature. But there is information that Coronavirus infection aggravates the course of systemic vasculitis and manifests itself as a complication. Recent literature notes that coronavirus infection serves as a trigger to increase the development of Kawasaki syndrome in children. These viruses cause chronic and aggravated forms of the disease that persist, such as systemic vasculitis. In this case, the development of an autoimmune disease can manifest itself after a long time after infection. Coronavirus infection histologically causes the deposition of fibrin in small blood vessels, while the surface deformation of the endothelium changes; after infection, the level of thrombin production in the endothelium increases by 2-3 times. This

results in tissue hypofusion, injury and their acute thrombosis and necrosis in internal organs. In addition, this infection causes systemic injuries to the body: respiratory, cardiovascular system, digestive, subtraction system, central nervous system and immune system, which in acute cases can lead to polyorgan failure. In connection with the above, it is very important to study, first of all, the clinical features of patients with coronavirus infection, that is, the effect of this infection on the course of systemic vasculitis.

The purpose of the scientific work : to study the effects of coronavirus infection (Covid-19) on the development of systemic vasculitis.

For the study, the Department of Rheumatology of the multidisciplinary clinic of the Tashkent Medical Academy and the arthrological IADK center included 40 patients (main group) aged 20-60 years (average age 37.52 ± 1.41) and 20 patients with systemic vasculitis who did not undergo an outpatient and inpatient treatment Coronavirus (Covid-19) infection between December 2020 and September 2022.

40% of patients in the main group (40 patients) (i.e. 16 patients) are patients with hemorrhagic vasculitis that occurs after Coronavirus (Covid-19) infection, 35% are (i.e. 14 patients) are patients with nodular erythema following Coronavirus (Covid-19) infection, and the remaining 25% (i.e. 10 patients) are patients with polyangiitic granulomatosis following Coronavirus (Covid-19) infection. Patients with hemorrhagic vasculitis accounted for 45% (i.e. 9 patients) of supervised (20 patients), patients with polyangiitis granulomatosis accounted for 30% (i.e. 6 patients), and patients with nodular erythema accounted for the remaining 25% (5 patients).

Women make up 55% of patients-33 patients. 33 patients also made up 68% of women between the ages of 20 and 40 when they were separated by age. The remaining 32% were female patients between the ages of 41 and 60. Then the average age is 38.52 ± 2.82 . Men make up 45% of patients-27 patients. When patients were separated by age, 67% were men between the ages of 20 and 40. The remaining 33% are male patients between the ages of 41 and 60. Then the average age is 36.72 ± 1.61 .

Including patients with hemorrhagic vasculitis caused by Covid-19 infection, 6% were found to have mild course of the disease in 1 patient, 44% were found to have moderate activity in 7 patients, and the remaining 50% were found to have high activity in 8 patients.

Coronavirus in 40% of the main group of patients (i.e. 16 patients) (Covid-19) constitutes patients with hemorrhagic vasculitis that occurs after infection.

16 patients with hemorrhagic vasculitis that appeared after infection (Covid-19) were isolated into the following forms, depending on which organs were damaged:

By form

1. skin and skin-articular form in 4 patients
2. simple form
3. necrotic form in 6 patients

5. abdominal form in 2 patients
6. nephrotic form in 2 patients
7. and the mixed form is observed in 2 patients.

35% of the main group of patients (i.e. 14 patients) are patients with nodular erythema, which occurs after Coronavirus (Covid-19)infection. This core group of patients was compared to 5 patients in control.

Acute nodular erythema 10 main group (70 percent) patients i.e. Coronavirus (Covid-19) was observed in patients with nodular erythema that followed infection. Acute nodular erythema was observed in 2 of the patients in control (30 percent).

Asymmetric arthritis was observed with pain in the knee and calf joints (arthralgia) ,swelling, redness, myalgia. (In 8 core groups and 3 controlled patients).Women (13 patients) made up a larger proportion of the infected men (6 patients).

Chronic nodular erythema (nodular angiitis) in contrast was more common in controlled patients. The reason is those who have been suffering from this disease for several years in controlled patients make up the majority. Thus 40 percent of the main group of patients are in 4 patients ; 60 percent of 3 patients in control experience chronic nodular erythema.While the remaining 25% of the main group of patients (i.e. 10 patients) are Coronavirus(Covid-19)constitute patients with Polyangiitic granulomatosis that occurs after infection.

1. difficulty breathing through the nose (In 6 patients)
2. the arrival of purulent blood secretions, (in 4 patients)
3. blood spitting (in 2 patients)
4. purulent blood mixed sputum arrival (in 4 patients),
5. scar stomatitis (in 1 patient)
6. purulent otitis (in 1 patient)
7. bacterial conjunctivitis (in 3 patients)
8. ulcerative necrotic tracheobronchitis (in 1 patient) was observed.
9. lung damage-formation of granulomas, exudative pleurisy (in 4 patients);
10. Acute kidney failure caused by strained glomerulonephritis in the kidneys (In 2 patients)were observed.

Conclusions. As a result of scientific research, systemic vasculitis that appear after Coronavirus infection, the specificity of the course of the course of its course, is considered to be its presence in high activity, multiple occurrence of medium-heavy and severe forms. Occurrence of clinical forms higher rates (55%) were observed in females compared to males (45%).

In adolescents and middle-aged people when taken with respect to age that is, it is noted that patients under the age of 20-40 are most likely (65%) was. Median age 37.52 ± 1.41

Older patients make up 35% in this regard. Appeared after coronavirus infection clinical course of systemic vasculitis as a result of the study of variants,

mainly medium and clinical options were observed, which are accompanied by damage to vessels of a small caliber.

Including hemorrhagic vasculitis out of 40 patients 16 (40%), nodular erythema 14 (35%) patients with polyangiitic granulomatosis in the Ham were 10 (25%). In addition to the diseases as we noted above with polyorgan damage at high activity late onset (70% at Xol), moderate activity onset (30%).

Middle heavy (40% and heavy formations recorded 60% more was.

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