AMERICAN JOURNAL OF EDUCATION AND LEARNING
ISSN: 2996-5128 (online) | ResearchBib (IF) = 10.91 IMPACT FACTOR
Volume-3| Issue-9| 2025 Published: |30-10-2025|

UOC: 616.72-002.77:579.61:616-076

EFFICACY OF THE IMMUNOMODULATOR ERIXIN IN PATIENTS WITH RHEUMATOID ARTHRITIS

https://doi.org/10.5281/zenodo.17420882

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Abstract

This article provides information about the treatment methods of rheumatoid arthritis. The results of laboratory and immunological indicators of disease activity are discussed. The effectiveness of treatment is determined using methods aimed at improving complex treatment.

Keywords

Rheumatoid arthritis (RA), Eriksin,Visual Analog Scales (VASH), Disease Activity Score-28 (DAS 28 index)

Introduction

Rheumatoid arthritis (RA) is a systemic autoimmune disease characterized by joint and extraarticular inflammation [3]. RA is a chronic, degenerative disease of unknown etiology, leading to progressive disability and affecting 0.2–1% of the world's population [7]. It is a chronic inflammatory disease that is often caused by the interaction of genes and environmental factors. It usually begins symmetrically in small peripheral joints, and as the disease progresses, it can lead to inflammation of proximal joints. Over time, joint inflammation can lead to joint dysfunction and erosion of cartilage and bone [3]. RA is usually diagnosed based on clinical symptoms and signs of active inflammation in the joints (joint swelling), as well as antibodies and biomarkers that indicate inflammation and joint damage [4]. The clinical and histomorphological manifestations of RA are systemic manifestations resulting from inflammation, accompanied by joint pain, swelling, and subsequent cartilage and bone destruction, resulting from arachidonic acid metabolites and various inflammatory cytokines. Another characteristic feature of RA is synovial hyperplasia, which is accompanied by the accumulation of T cells in the synovial space [2].

RA cannot be completely cured, but it can be kept in remission.To achieve complete cessation of disease activity (clinical remission), rheumatologists must continuously and accurately monitor disease activity and adjust the treatment regimen accordingly [5]. Early diagnosis is key to optimal therapeutic success,

especially in patients with high disease activity, such as high antibody levels and early joint damage [6].

Eriksin (free amino acids, low molecular peptides, as well as microelements) are biologically active substances extracted from the biomass of snakes belonging to the genus Yegukh'be,is an immunomodulatory and biostimulating agent. In cases of immunodeficiency and autoimmune processes, it normalizes the quantitative and functional indicators of the T-system of immunity: T-lymphocytes and their subpopulations, enhances phagocytosis; indirectly affects B-cells, inhibiting the synthesis of antibodies. Stimulates the immune response to infections (viruses, bacteria), enhancing their elimination process. Erythromycin also has analgesic, anti-inflammatory and immunomodulatory effects[1]In our study, we evaluated the efficacy of this drug in patients with RA.We learned.

Research objective. Studying the effectiveness of the immunomodulator Erythrin, a biologically active substance, in patients with rheumatoid arthritis.

Research materials and methods. The study was conducted on 60 patients treated in outpatient and inpatient settings at the Republican Center for Rheumatology, Arthrological Specialized Outpatient Treatment Course, and Therapy and Nephrology Departments of the Multidisciplinary Clinic of the Tashkent Medical Academy during 2024-2025. Also, patients were divided into 2 groups depending on the type of treatment The study was conducted in two groups. Group 1 (n=30) patients received baseline treatment, while Group 2 (n=30) patients received intravenous injection of the immunomodulator Eriksin along with baseline treatment, and the clinical and laboratory parameters of the patients were analyzed.

During this study, 58 of the total patients (60) were women and the remaining 2 were men. Among them, 5 patients were aged 19-30, 24 patients were aged 31-50, and 31 patients were aged 51-80. During this study, instrumental (X-ray), laboratory (ECHT, Rheumatoid arthritis) and immunological (IL-1, IL-6) examination methods were used. The number of painful joints (OBS), the number of swollen joints (ShBS) were determined in both groups of patients, and a complete blood count, rheumatology, complete urine analysis, radiography of the palms of the hands and feet, and immunological tests were performed. In order to determine the activity of the disease, the DAS28 index (Disease Activity Score-28, reflecting the activity of rheumatoid arthritis), ACCP (Cyclic citrullinated peptide, ACCP titer to anti-CCP-AT, anti-CCP antibodies) were used. Analyzes were conducted that allow to detect the earliest signs of rheumatoid arthritis. The effectiveness of treatment of patients was studied.

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Research results. During our study, clinical, laboratory, and immunological parameters of patients with RA were studied. The results of the two groups were compared before and after treatment, using a comparative analysis of joint parameters, the VASH scale, the DAS 28 index, and several immunological parameters.

Table 1

Comparative analysis of joint parameters in rheumatoid arthritis patients

Indicators	Groups	Before treatment	1 month after treatment
OBS	Group 1 (n=30)	3.1±1.52	2.1±1.32
	Group 2 (n=30)	3.2±1,63	1.03±0.89
SBS	Group 1 (n=30)	2,73±0,45	1.8±0,7
	Group 2 (n=30)	2,73±0,45	0,4±0,5
WASH	Group 1 (n=30)	7.43±1.48	5.03±1.5
	Group 2 (n=30)	6.9±1.84	1.27±0.64
DAS 28	Group 1 (n=30)	4.3±0.69	3.67±0.66
	Group 2 (n=30)	4.42±0.54	2.58±0.53

Note: The significance of the difference between groups 1 and 2 is *-p<0.05, **p<0.01; ***p<0.001.

The results of the study showed that the DAS 28 index and the joint pain index according to VASh were significantly reduced in group 2 compared to group 1 (p<0.05).

Table 2

Acute test results in rheumatoid arthritis

Indicators	Group 1 (n=30)		Group 2 (n=30)	
	Before treatment	1 month after treatment	Before treatment	1 month after treatment
CRO (g/l)	26.2±6.09	24.58±7.34	26.67±6.6	12.07±5.5
RF	25.24±7.77	27.00±7.90	18.40±9.5	10.40±5.4
NOT	392.96±141.96	369.87±147.96	514.00±176.5	292.00±59.7

Note: The significance of the difference between groups 1 and 2 is *-p<0.05, **p<0.01; ***p<0.001.

According to the results of laboratory data, SRO and ASLO significantly decreased after treatment in patients in group 2 compared to group 1 (p<0.001;p<0.0001).

RA patients show immunological IL-1, IL-6 andFNO-α cytokines were examined to determine the therapeutic effect of Eriksin injection.

Table 3

Immunological indicators of treatment efficacy in rheumatoid arthritis

Indicators	Groups	Before treatment	1 month after treatment
IL-1	Group 1 (n=30)	1.81±0.6	1.79±0.3
	Group 2 (n=30)	1.85±0.5	1.74±0.3
IL-6	Group 1 (n=30)	18.43±2.8	16.37±2.8
	Group 2 (n=30)	20±2.0	17.5±3.5
FNO-α	Group 1 (n=30)	20.5±4.4	21.8±3.2
	Group 2 (n=30)	22.6±3.9	20.93±2.2

According to the data in Table 3, before treatment and 1 month after treatment, IL-1, IL-6 andFNO-α cytokinesPatients in group 2 who received Eriksin injection in combination with basic treatment showed a significantly higher improvement compared to patients in group 1 who received basic treatment ($p<0.05$) was found to decrease.

Conclusion. According to the results of the study, we can see positive changes in both groups of patients. However, due to the immune-boosting and other properties of the biologically active substance Eriksin, positive changes were relatively greater in group 2, that is, in patients who received basic anti-inflammatory drugs and Eriksin injections, and clinical remission of the disease was achieved.

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