

Modern Diagnostic Methods of Rheumatoid Arthritis

Khojakulova Farida Ismoilovna¹, Sariboyev Fakhridin Yokub ogli², Sariboyeva Shokhsanam Yakub kizi³

¹Assistant of the Department of Medical Biology, Termez branch of the Tashkent Medical Academy

² 3rd year student of Termez branch of Tashkent Medical Academy, sariboyevfakhridin1212@gmail.com

Telefon:+998993803912

³Student of the Tashkent Pediatric Medical Institute

Annotation: *Rheumatoid arthritis. Rheumatoid arthritis is a chronic, systemic disease of the connective tissue characterized by erosive-destructive damage to peripheral joints and is more common in young and middle-aged women.*

Keywords: Rheumatoid arthritis, UTT, ECG, ExoKG, Epstein-Barr virus, Lymphadenopathy, Vaaler-Rose reaction

Relevance of the topic. Systemic connective tissue disease in patients is one of the most pressing problems in cardiorheumatology. The prevalence of rheumatoid arthritis among systemic connective tissue diseases in recent years, and the development of disability in patients, indicate the urgency of the disease. The development of disability in patients means that the disease is not only a medical but also a social problem. In some cases, damage to the internal organs can be observed, and many complications can develop. Approximately half of the patients develop a disability after 3-5 years after the onset of the disease. Therefore, early diagnosis of this disease is of great importance.

The purpose of the research. It consists of studying modern methods of diagnosing rheumatoid arthritis in patients. This allows us to diagnose the disease early and treat it in a timely manner.

Research materials and methods. Patients with arthritis symptoms treated at the Termez City Cardiorheumatology Department were screened. All patients underwent clinical, laboratory, and instrumental examinations. Laboratory tests included general blood tests, *SRO, ASLO, ATsTsP*, instrumental examination of internal organs *UTT, ECG, ExoKG*.

Results of research. In the research, thirteen (38.2%) of the patients in the study were men and 21 (61.8%) were women. The study of the history of the disease in patients revealed hereditary predisposition to the disease, in particular, the presence of systemic connective tissue diseases in close relatives, physiological allergies (sexual development, postpartum, climacteric), meteorological conditions. The results of general blood tests in all patients showed the presence of inflammatory processes in the body, as well as the presence of anemia. The presence of C reactive

proteins 27 (79.4%), the increase in the titer of ASLO 21 (61.7%), and the formation of reactive C proteins indicate the inflammatory process and are not highly specific. An increase in ASLO titer can be observed in any organism that has undergone streptococcal infection.

Etiology and pathogenesis. The etiological factor causing the disease has not yet been determined. However, some authors claim that Epstein-Barr viruses, L-form bacteria, and microplasmas play a crucial role in its formation.

Cooling, respiratory viral infections, stress conditions - are the important factors that contribute to the development of rheumatoid arthritis. The pathogenesis of the disease lies in the appearance of antibodies against immunoglobulins (Igl, IgM) in the body - rheumatoid factor. This factor is detected in the synovial fluid of the joint in the peripheral blood. Rheumatoid arthritis is called seropositive when detected in both, and seronegative only in the latter.

Classification. The clinical manifestations of rheumatoid arthritis include joint (80%) and joint-visceral forms, acute, subacute and slow progression, seropositive and according to the detection of rheumatoid factor.

Seronegative types and four according to X-ray changes stage (narrowing of the *I-joint* fracture and osteoporosis; *II-I* + isolated patterns; *III-II* + multiple patterns and half-protrusions of bones; *IV-III* + ankylosis).

Clinical landscape. More minor joint injuries, marked morning numbness after prolonged inactivity, and rapidly developing deformity of the injured joint are clinical signs characteristic of rheumatoid arthritis. As the disease progresses, the duration of morning numbness increases. The movements in the joints are performed with a certain difficulty (this syndrome is explained by a tumor of the

periarticular tissue), and in the evening the movements are somewhat relieved. Patients also complain of general weakness, fever, loss of appetite. In cases of severe arthritic changes, on objective examination can be seen specific deformities of the joints, semi-extensions, ankylosis. Bending of the fingers in the ulnar direction (ulnar deviation in the form of "suckers"), contracture of the proximal interphalangeal and flexor and distal interphalangeal joints (finger "button loop") Rheumatoid arthritis is a deformity of the palm-phalanx and distal joints (deformity of the finger in the form of a "white bird's neck"). Because the specific changes in the fingers mentioned above are important for diagnosis, some authors refer to flour as a "visiting card" of the disease.

In addition to examining the joints, it is important to feel them to determine the presence of pain and the degree of active and passive limitation of mobility. Palpation also detects muscle atrophy around the affected joints, which is typical for rheumatoid arthritis.

In most cases, hardened rheumatoid nodules with a diameter of JO, 5-1.5 cm in diameter are palpated in the subcutaneous tissue above the elbow joint and bone, on the axillary tendon and in the cervical aponeurosis. They are usually mobile, active and not joined by surrounding tissues. Lymphadenopathy, spleno, and hepatomegaly are the most common forms of rheumatoid arthritis in adolescents. Also, in some patients, objective examination and laboratory tests reveal signs of acute subacute or chronic myocarditis, pleurisy, diffuse fibrous alveolitis and glomerulonephritis. In some cases, the disease develops visceral amyloidosis.

Laboratory - instrumental tests. The general blood test reveals an increase in ECHT (up to 40-60 mm / h), hypo or normochromic anemia. Biochemical analysis of blood shows nonspecific tests that reflect the activity of the inflammatory process - dysproteinemia (hypergammaglobulinemia, serum a2-globulins, increased levels of fibrinogen), the formation of seromucoids, high titer of S-reactive protein. In the diagnosis of rheumatoid arthritis, it is important to detect rheumatoid factor in blood serum and synovial fluid using a latex test or the Vaaler-Rose test. Radiography of the joints allows to detect osteoporosis of the epiphyses of the bones in them, narrowing of the joint fissures, embossing of the joint surfaces, the formation of microcysts in the epiphyses. In severe cases, there is a partial and complete dislocation of the bones, as well as their deformation and complete adhesion of the joint fractures (ankylosis).

Modern principles of diagnosis of rheumatoid arthritis. The diagnosis of RA is complicated in the early (exudative) period, when there are no clinical signs of the disease. Only the clinical form, which includes the palmar phalanx, proximal interphalangeal and palmar phalangeal joints - symmetrical polyarthritis, is suspected early and sufficiently confirmed. The diagnostic criteria for RA recommended by the American Association of Rheumatologists (AAR) in Table 4 below are of practical importance.

Table 4

Diagnostic criteria for rheumatoid arthritis proposed by the American Association of Rheumatologists

<i>Criteria</i>	<i>Analysis of criteria</i>
<i>Morning numbness;</i>	<i>In the joints or pre-articular tissues (hardening for at least an hour).</i>
<i>Symptoms of arthritis in three or more joints</i>	<i>Presence of at least three joint and anterior articular soft tissue tumors or fluid in the joint cavity (absence of osteophytes) as determined by the physician. Symmetrical bilateral lesions of the proximal interphalangeal, palmar-phalangeal, palmar-wrist, elbow, knee, and calf joints (there are 14 joint areas on the right and left).</i>
<i>Arthritis of the jaw joints</i>	<i>Tumors of the proximal interphalangeal, palmar, phalangeal, wrist, elbow, and knee joints;</i>
<i>Symmetrical arthritis</i>	<i>Simultaneous injury of the same joints on the right and left sides (proximal interphalangeal, palmar-phalangeal, palm-wrist, elbow);</i>

	Rheumatoid nodules;	<i>A doctor identifies a painless, mobile subcutaneous node located in the area where the joints (usually the elbows) extend.</i>
	Detection of rheumatoid factor in blood serum;	<i>High RA using any test method (Vaaler-Rose or latex test).</i>
	X-ray changes	<i>Presence of changes of RA in the injured joints according to the X-ray stage (stage I - osteoporosis and narrowing of the joint space; stage II - significant narrowing of the joint space, the appearance of individual patches stage III - the appearance of multiple patterns and semi-extensions; stage IV - the addition of ankylosis to the above changes).</i>

Treatment. Therapeutic measures are aimed at stopping the mechanism of disease development, including glucocorticoids, aminoxinoline drugs (delagil, plakvenil), penicillamine (cuprenyl), a-anti-tumor necrosis factor and nonsteroidal anti-inflammatory drugs are used. Patients are also prescribed therapeutic gymnastics, physiotherapy treatments (according to the instructions).

Prophylaxis. Timely detection and complete treatment of foci of chronic infection (oral sanitation, chronic tonsillitis and chronic otitis) is an essential preventive measure of rheumatoid arthritis.

Conclusion. The diagnosis of rheumatoid arthritis is based on medical history, clinical signs, laboratory and instrumental findings. The purpose of the diagnosis of rheumatoid arthritis is to detect the disease or changes in the body at an early stage, to prevent their progression.

References:

1. Gadaev A. Internal diseases, T .: —Turon Zamin Ziyu, 2014.
2. Merta Dj. Spravochnik vracha obshey praktiki. Translation from English. M.: Practice, 1998.
3. Nobel Dj. Obshaya vrachebnaya practice. M .: Practice, 2005.
4. Ostryaov YE.K. Rheumatic diseases: diagnostics and prophylaxis, Mi: Polymya, 2007.