ENDOTHELIAL CHANGES IN RHEUMATOID ARTHRITIS

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Abstract: *It is a systemic inflammatory disease of the connective tissue, which is characterized by chronic escalating erosive-destructive polyarthritis.*

Key words: *Pannus, erosive-destructive, exudative, window, poly-oligo.*

The etiology has not been determined

• Group A and B streptococci, intestinal and urinary infections, mycoplasma, Ebstein-Barr virus, which is located in B-lymphocytes and has the ability to disrupt the synthesis of immunoglobulins, are important in the development of the disease.

• Hereditary factors

I Exudative changes in the soft tissues of the joint.

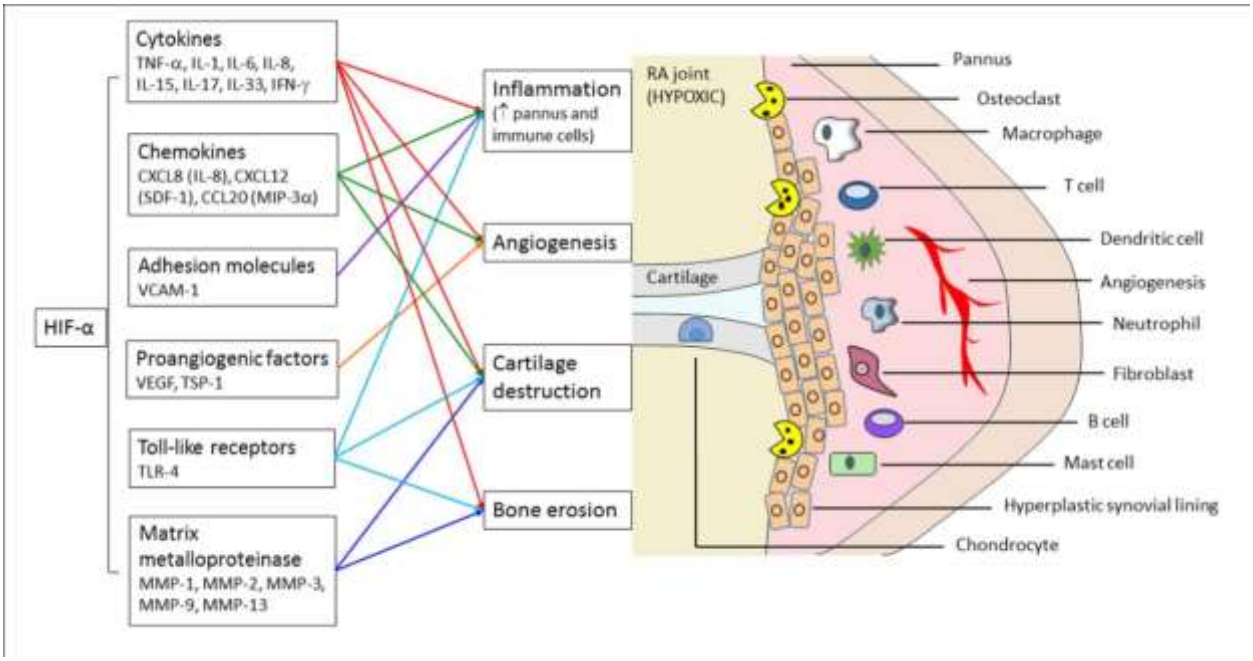
II In the process, pre-articular tissues with thick tissue are added, fibrotic-sclerotic changes develop, granulation connective tissue (pannus) is formed and develops in the synovial membrane. Pannus gradually destroys the togai and the epiphysis of the bone, as a result of which a wound, a hole, a crack appears. Viscous turbid synovial fluid is detected in the joint space.

In the III-last stage, the erosion of the tendon leads to dislocation, partial dislocation, ankylosis (immobility) and changes in the shape of the joints. In rheumatoid arthritis, disorganization of connective tissues and organs is always observed along with joint damage. Therefore, this disease is interpreted as a systemic disease.

Classification. Our country uses a working program (adopted in 1980 by the plenum of the Society of Rheumatologists) that takes into account the clinical-anatomical description of the process, its course, level of activity, X-ray level of arthritis and the patient's functional ability. In the classification, 4 clinical types of the disease are expressed: I - mainly in the form of joint form - poly-oligo or monoarthritis; II - joint-visceral form; III - coexistence of rheumatoid arthritis with other widespread diseases or joint diseases; IV – juvenile rheumatoid arthritis. According to the rate of development of the pathological process, it is possible to distinguish the gradual, rapid and mild (safe) types of rheumatoid arthritis. In the classification, depending on the presence or absence of RO in the condyle and synovial fluid (determined by the Vaa-lar-Rose reaction and the latex test), a section on the patient's seropositive or seronegative status is allocated. Depending on the clinical and laboratory symptoms, three activity levels of rheumatoid arthritis are defined: I - minimal, II - medium, III - high level.

Clinical appearance. The beginning of the disease can be different. Often it develops slowly, slowly and protracted, but in acute or semi-acute form. Wolf syndrome plays an important role in the clinical presentation of the disease - up to 85%, and the remaining 15%

is extra-articular (visceral) type. The first appearance of the visceral type depends on the spread of damage to the vessels - (vasculitis of the damaged organ). Factors that trigger the onset of the disease: flu, angina, upper respiratory tract infection, nervous tension, cold, insolation, joint laxity, drug addiction, pregnancy and childbirth.



Joint syndrome

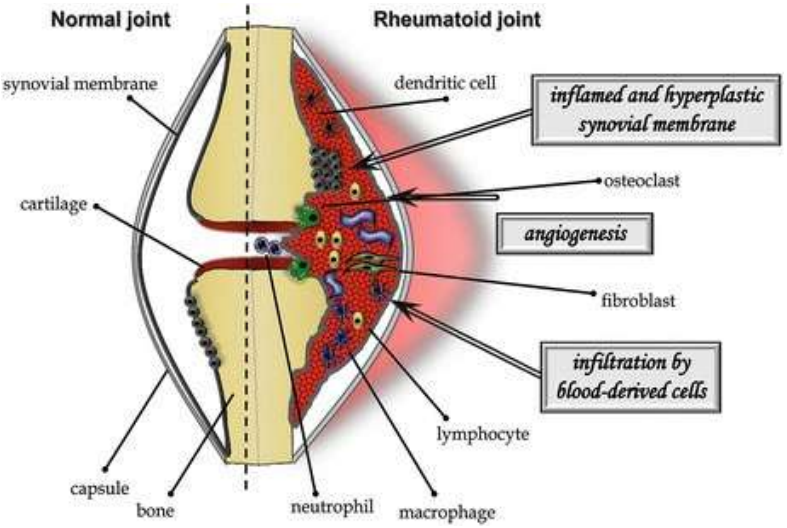
(1) The main symptom at the beginning of the disease is polyarthralgia - pain without pain - damage to symmetrically located small (mostly wrist, palmar and interphalangeal) sections (50 percent), partially large joints (25 percent) and monoarthritis (25 percent). The pain is stronger in the morning and in the first half of the day, and decreases in the evening. Arthritis in the damaged joints is constant and constant, gradually increasing as the disease progresses.

(2) Tightness of movement in the joints, especially in the morning or after prolonged inactivity, is one of the earliest and persistent symptoms of rheumatoid arthritis. Movement in the joints is performed very slowly. This symptom is explained by tissue (periarticular) swelling around the joint, as well as low amount of endogenous glucocorticoids in the bone.

(3) The disease is sometimes accompanied by fever, loss of appetite, rapid fatigue, weakness.

(4) When examining, it is determined that the damaged joints are swollen (Fig. 25). Inflammation is observed in an acute form in the proximal interphalangeal sections of most fingers. When proliferative changes are added to the exudative changes in the joints, they are deformed (deformed). Changes characteristic of this disease in paw joints are also called "visiting card". Bending of the palmar-phalangeal joint (contracture), backward bending of the proximal interphalangeal joints, and bending of the distal interphalangeal joint shows changes in the "Swan neck" shape of the finger. is called change. Changes in the panjaphalanga joints, due to the partial protrusion of the joints, they are bent to the ulnar side and the shape of the palm has changed, it is called "ulnar deviation" or "walrus swimmer's palm". If along with ulnar deviation, the phalanges are enlarged, the skin covering them becomes thinner and less swollen, this change of the palm is called "Lornet hand". Changes also occur in the bones of

the joint: the ends of the bones inside the joint stick together and become stuck, due to which the movement of the joint is lost, ankylosis (joint stiffening of the im) develops.



Extra-articular (systemic) manifestations of rheumatoid arthritis, including damage to internal organs, are rarely expressed directly. Therefore, they require careful research. Most subcutaneous nodules and polyneuropathy are observed.

(1) Rheumatoid nodules are detected in approximately 10-20 percent of patients. Most often, they are located in the subcutaneous tissue around the elbow joint, under the Achilles tendon. Nodules are 0.5-1.5 cm in size, mobile, painless and hard, not attached to the surrounding tissues. They can be one or several, never inflamed or suppurated. Rheumatoid nodules appear during the exacerbation of the disease, are located symmetrically, and may disappear during remission. In the early stage of the disease, during the development of active arthritis, the nearby muscles participating in the movement of the damaged joints atrophy, sometimes myositis can be observed in the muscles.

(2) Polyneuropathy-appearance of peripheral nerve vasculitis. In this process, damage to the distal part of the nerve trunk is observed with a violation of sensitivity. Patients complain of tingling, pain, and coldness of the distal parts of the limbs. Palpation reveals pain in the damaged joint, increased or decreased sensitivity in the area of the damaged nerve. Occasionally there are movement disorders.

(3) In the active period of the disease, lymphadenopathy - enlarged lymph nodes (under the jaw, neck, etc.) is detected in some patients.

(4) Clinical signs of rheumatoid damage in internal organs (usually heart, lungs, kidneys) are rarely observed.

1. Rheumatoid myocarditis, endocarditis, and finally pericarditis may develop when the disease is highly active. Some mitral valve insufficiency is formed and it is relatively mild, hemodynamic disturbances are almost not observed.

2. An inflammatory condition (vasculitis) is observed in the walls of blood vessels. Because of this, symptoms of microinfarction appear in the distal part of the fingers, and Raynaud's syndrome appears in large blood vessels.

3. Pulmonary effusion damage with the development of nodules, alveolitis, pulmonary vasculitis, and pleurisy may occur.

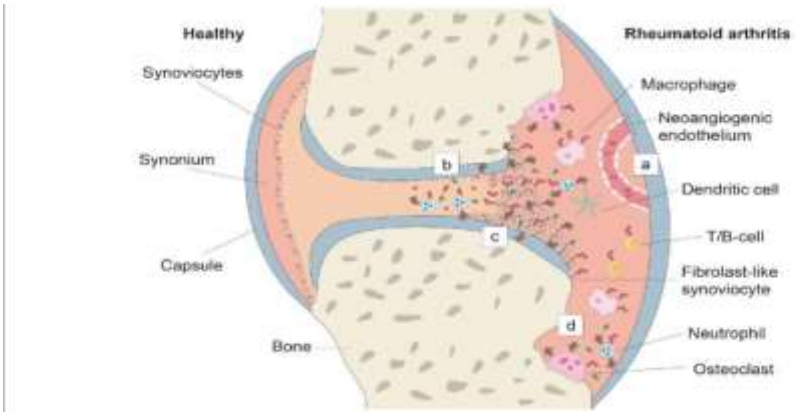
4. Renal damage in rheumatoid arthritis can be in the form of nephritis, pyelonephritis, renal amyloidosis and nephrotic syndrome.

5. Liver damage is expressed in the form of rheumatoid hepatitis, liver amyloidosis, and 60-80 percent of patients experience liver dysfunction.

6. Symptoms of amyloidosis may develop in the gastrointestinal system.

7. Rheumatoid arthritis-specific changes are observed in the nervous, endocrine system and eyes.

(5) An increase in ECHT, C-reactive protein, alpha-2 and gamma-globulins, and an increase in fibrinogen are detected in the blood test. When the disease is severe and the internal organs are damaged, hypochromic anemia develops, the number of leukocytes and neutrophils is at a normal level.



(6) Immunological changes at the beginning of the disease are characterized by an increase in the titer of rheumatoid factor (RO), which is produced by the plasma cells of the joint synovial shells in the synovial fluid, and is detected by the Waaler-Rose or latex test tests, and the activity of the pathological process it is directly related to the level, course, and the state of damage to non-articular organs. Some (20 foia) patients have a "seronegative" type of the disease, and RO is not found.

(7) When the joints are examined by X-ray method, thinning of the bone epiphysis (osteoporosis), narrowing of the joint grooves, partial or complete dislocation of the joints, sprains and stiffness of the bones It is determined that their surfaces are rough and injured (extension), osteophyte growth at the edge of the joint surface, sharp deformation of the joints and complete healing of joint cracks (arthrosis) .

(8) **Diagnosis.** Due to the absence of pathognomonic symptoms of the disease, the diagnosis of rheumatoid arthritis should be based on the sum of clinical and radiological examinations.

According to the proposal of the American Association of Rheumatologists, 7 signs of the disease are diagnostic (diagnostic) criteria:

(1) Limitation (stiffness) of joint movement in the morning;

(2) Arthritis of 3 or more joints

(3) Ash paw joint arthritis

(4) Symmetric arthritis

(5) Rheumatoid nodules

(6) Rheumatoid factor detection

(7) Radiological changes

REFERENCES:

1. Ignatiev VK Rheumatoid arthritis. - Petrozavodsk, 1997 (co-author)
2. Clinical rheumatology (rukovodstvo dlya vrachey) , 2-e izd., pererab. i dop, SPb.: OOO "Izdatelstvo FOLIANT", 2005. ISBN 5-93929-127-9 .
3. Childhood diseases. Baranov AA // 2002.