

Arthritis Disease and its Types

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Annotation: Arthritis is a disease caused by inflammation of the joints, which is usually manifested by pain, swelling, limitation of movement and changes in the shape of the joint. This disease can occur in people of all ages. The main symptom of this disease is inflammation of the ligaments. Arthritis often begins before the age of 40. Arthritis of the joints is a disease that occurs due to the following reasons: bacterial, viral or fungal infection, trauma, allergy.

Keywords: types of arthritis, causes, symptoms, methods of treatment, preventive measures.

Introduction: There are several types of arthritis, including rheumatoid arthritis. It is an autoimmune disease in which the body's immune system attacks its own tissues. It mainly affects small joints and, in severe cases, leads to joint destruction. It is believed that the disease develops in individuals with a hereditary predisposition as a result of an infection that causes a violation of the immune system; this leads to the formation of immune complexes (consisting of antibodies, viruses, etc.) that are deposited in the tissues and cause joint damage. The disease is characterized by a high rate of disability (70%) that occurs very early. The main causes of death from the disease are infectious complications and renal failure. Rheumatoid arthritis progresses in three stages. In the first stage, periarticular swelling of the synovial sacs occurs, which causes pain, local fever, and swelling around the joints. The second stage is rapid cell division, which leads to thickening of the synovial membrane. In the third stage, the inflamed cells produce enzymes that damage the bones and cartilage, which often leads to deformation of the affected joints, increased pain and loss of motor functions. This disease affects women 3-5 times more often than men. Every year, 5-10 out of 100,000 people develop the disease. In 2010, about 49,000 people died from rheumatoid arthritis [1].

Main stage: Osteoarthritis is a degenerative disease. This disease causes pain, swelling and stiffness in the joints, which limits freedom of movement. Osteoarthritis affects the entire joint, including the tissues around the joint. The disease most often affects the knee, hip, spine, and wrist. The symptoms of osteoarthritis begin gradually and usually begin in one or more joints. Pain may improve with rest, using a joint brace, or using a splint. Swelling in and around the foot occurs, especially after a lot of activity. Among musculoskeletal disorders, osteoarthritis is one of the pathologies that contributes the most to the number of years lived with disability. Since the prevalence of osteoarthritis is highest in older people (approximately 70% of people over 55 years of age), the global prevalence of this disease is expected to increase with age. The onset of the disease usually occurs after the age of 40 or after the age of 50. Approximately 60% of people diagnosed with osteoarthritis are women[2].

Treatment of osteoarthritis often involves the participation of healthcare professionals from various disciplines who contribute to a rehabilitation strategy tailored to the patient's needs and preferences. Early diagnosis and treatment are the best measures to slow the progression of the disease and achieve optimal function. Physical exercise helps strengthen the muscles involved in the disease process and improve mobility[3].

Gout (acid arthritis). As a result of an increase in uric acid in the blood, crystals form in the joints, leading to inflammation. Usually it is manifested in the big toes. The causes of the disease are 3:

1- accumulation of uric acid compounds in the body.

2- deposition of these compounds in organs and tissues.

3- development of acute attacks of inflammation in the lesions, the formation of gouty granulomas and gouty "joints" - tophi, usually around the joints[4].

The full natural evolution of gout occurs in four stages: Asymptomatic hyperuricemia; acute gouty arthritis; intercritical period; chronic gouty deposits in the joints.

Nephrolithiasis can develop at any stage except the first stage.

There is a constant high concentration of uric acid in the blood plasma and urine; inflammation of the joints in the form of monoarthritis, accompanied by severe pain and fever; urolithiasis and recurrent pyelonephritis, ending with nephrosclerosis and renal failure [5].

Patients with gout, detected for the first time or during the exacerbation of the disease, are treated inpatiently in specialized rheumatology departments of regional or city hospitals. A person with gout can be under the supervision of a rheumatologist or nephrologist at the place of residence in district clinics during the remission of the disease, provided that appropriate therapy is prescribed. The estimated duration of treatment in the hospital (specialized rheumatology departments) is 7-14 days, provided that adequate effective therapy is selected and clinical and laboratory signs of the disease improve[7].

Infectious arthritis. Infectious arthritis is an inflammatory process that occurs in the joints, which develops as a result of infection. This disease can develop rapidly and cause serious damage to the joint tissues. The main causes are the following: bacteria, viruses, fungi, injuries, and immune deficiency.

Psoriatic arthritis. Psoriatic arthritis is a chronic progressive disease that occurs with psoriasis. It mainly affects small joints (interphalangeal) such as the fingers and toes, and joints such as the spine[8].

The prevalence of this disease among the population is 2-3%, and from 3.5 to 47% of patients may develop arthritis. Psoriatic arthritis most often begins between the ages of 20 and 50, and men and women can be affected equally. There are cases of psoriatic arthritis in younger men[9].

To prevent psoriatic arthritis, the causes that caused it must be completely eliminated. Maintaining the functional ability of the joints "Secondary prevention (i.e., preventing the deterioration of the patient's condition after the onset of the disease) is carried out, aimed at maintaining the functional ability of the joints and slowing the progression of psoriatic arthritis[10].

"Psoriatic arthritis can also occur in combination with protected or peripheral arthritis. This is an inflammation of the spine, sacroiliac joints, as in ankylosing spondylitis. It is often combined with peripheral arthritis, only in 2-4% of cases it is isolated. Mutilating arthritis is a shortening of the fingers or toes with multidirectional subluxation of the fingers. That is, the formation of a "telescope" deformity. A rare form found in only 7% of patients, local osteolysis can develop in all clinical forms of psoriatic arthritis[11].

"The main manifestations of psoriatic arthritis are peripheral arthritis, dactylitis, enthesitis, and spondylitis. Peripheral arthritis is clinically characterized by pain, swelling, and joint limitation. Characteristic features include asymmetric involvement of the lower extremities, eventually progressing to polyarthritis; axial arthritis; dactylitis, and sausage-like deformity of the fingers and toes. Dactylitis is an acute or chronic inflammation of the finger, clinically characterized by pain, discoloration, swelling, and limitation of motion. Sausage-like deformity of the fingers is characteristic of psoriatic arthritis[12].

This is a typical feature of psoriatic arthritis, which is caused by simultaneous damage to the flexors and/or extensors of the fingers, as well as arthritis of the interphalangeal joints." Tenosynovitis is characterized by pain, swelling, and limitation of motion along the tendons fingers spondylitis is characterized by inflammation of the back and pain in various parts of the spine.

Arthritis begins due to inflammation of the synovial membrane of the inner joint, which leads to the accumulation of inflammatory fluid (exudate) [13].

Analysis and results: Symptoms of the disease include muscle atrophy, joint damage, swelling of the joints, stiffness in the morning, and increased pain at night.

Causes of the disease. Autoimmune diseases: occur as a result of the immune system attacking its own tissues. For example, rheumatoid arthritis. Infections: sometimes fungi, bacteria, viruses, enter the joints and cause inflammation. This is also called septic arthritis.

Age-related osteoarthritis is caused by wear and tear of the joints as you get older. Genetic predisposition If family members have arthritis, the risk of developing this disease increases

Joint damage over the years leads to the development of osteoarthritis. Metabolic disorders. Gouty arthritis occurs as a result of the breakdown of uric acid crystals in the body.

Weight and unhealthy lifestyle: Obesity puts an excessive load on the joints, which causes inflammation.

Diagnosis and treatment of arthritis: At the reception, the doctor conducts a survey and an initial examination, prescribes instrumental and laboratory tests.

Initial examination. If arthritis is suspected, the doctor will determine what happened before the pain attack. This will help to understand the cause of the disease. For example, gouty arthritis is usually preceded by overeating and alcohol abuse, while traumatic arthritis is preceded by vigorous physical activity.

During the examination, the doctor assesses the condition of the joints: with arthritis, the affected joint is swollen, the skin over it may be red, hot and painful. Laboratory examination methods

To assess the general condition of the body and determine the cause of the disease, the doctor prescribes a clinical blood test. If gouty arthritis is suspected, an analysis is prescribed to determine the level of uric acid in the blood. Analysis of the joint (synovial) fluid is used to detect uric acid crystals or bacteria. Immunological studies help in the diagnosis of rheumatoid and post-streptococcal arthritis. During the study, the level of specific autoimmune antibodies in the blood, signs of inflammation of the joints are determined.

Conclusions

1. Treatment of arthritis depends on the cause of the disease. So, for the treatment of gouty arthritis, drugs are used that reduce the level of uric acid in the blood, and non-steroidal anti-inflammatory drugs and temporary immobilization of the joints help with traumatic arthritis.
2. X-rays and computed tomography allow you to assess the condition of the joints and identify deformations or other changes in them. In addition, such studies allow you to understand the cause of joint pain. Ultrasound allows you to assess the severity of inflammation and determine the presence of damage to soft tissues, such as tendons. Often, ultrasound can show signs of gouty arthritis.
3. Phytotherapy, or the treatment of patients with plants, has been widely used since ancient times. This method is about 7 thousand years old. In the book "Canons of Medicine" by Ibn Sina, more than 2,400 medicines are listed. Of these, 1,400 are classified as herbal medicines.

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