THE ROLE OF BILIARY TRACT DISEASES IN THE DEVELOPMENT OF ARTHRITIS AND ARTHROSIS

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ABSTRACT: Arthritis and arthrosis are observed in almost all of the population today as they age. The development of the disease is due to a number of internal and external factors. The increased inflammatory process in the body due to gallbladder diseases, gallstone disease (cholelithiasis) and chronic cholecystitis causes degenerative changes in the joints.

АННОТАЦИЯ: Артриты и артрозы наблюдаются сегодня практически у всего населения по мере старения. Развитие заболевания обусловлено рядом внутренних и внешних факторов. Усиление воспалительного процесса в организме вследствие заболеваний желчного пузыря, желчнокаменной болезни (холелитиаза) и хронического холецистита вызывает дегенеративные изменения в суставах.

KEYWORDS: Arthritis, Arthrosis, Gallbladder, Infections, Anemias.

КЛЮЧЕВЫЕ СЛОВА: Артрит, Артроз, Желчный пузырь, Инфекции, Анемии.

INTRODUCTION:

Arthritis is a group of inflammatory diseases in which the main symptom is inflammation of the joints. Over time, the inflammation can affect the joint surfaces, such as the epiphyses of bones and cartilage, as well as the tissues around the joints, including tendons, bursae, and ligaments.

The main types of arthritis are:

- Rheumatoid arthritis - caused by staphylococcal infection, causes pain and swelling in the joints, and can affect the skin, kidneys, liver, and heart.

- Gouty arthritis - occurs as a result of metabolic disorders, accompanied by the accumulation of uric acid in the joints.
- Infectious arthritis - caused by intestinal infections such as typhoid fever, salmonellosis, and dysentery.

Causes

Arthritis begins with inflammation of the synovial membrane inside the joint, which leads to the accumulation of inflammatory fluid (exudate).

Causes of arthritis can include:

- Weakened immune system
- Infections
- Allergic reactions
- Sedentary lifestyle

LITERATURE REVIEW AND METHODOLOGY:

Arthritis and arthrosis are diseases that cause pathologies of the joints and bones, and their development is influenced by a number of internal and external factors. Gallbladder diseases, in particular cholelithiasis (gallstones) and cholecystitis (inflammation of the gallbladder), can increase inflammatory processes in the body and thereby accelerate degenerative changes in the joints. This article presents a scientific analysis of how gallbladder diseases affect the development of arthritis and arthrosis, the relationship between these diseases and the mechanisms involved. The gallbladder is an organ that stores bile produced by the liver and helps digest fats. Gallbladder diseases are disorders of the functioning of this organ, for example, the formation of gallstones (cholelithiasis) or inflammation of the gallbladder (cholecystitis) - activate inflammatory processes in the body. In cholecystitis, for example, the gallbladder becomes inflamed, which leads to the production of inflammatory mediators (cytokines, prostaglandins). These substances, in turn, affect other systems in the body, including the joints. In cholelithiasis, gallstones can provoke changes and inflammation, which in turn

increases the mechanisms affecting the joints. Theoretical basis. Arthritis is a disease caused by inflammation in the joints, of which there are many types. Arthritis causes swelling, pain, movement restrictions and deformities in the joints. Autoimmune diseases such as rheumatoid arthritis (RA) and psoriatic arthritis increase inflammation, which leads to structural changes in the tissues of the joints. Osteoarthritis is characterized by degeneration of the joints and wear of the cartilage (bone covering). In this disease, the joints become stiff, movement is limited, and pain increases. Although the main cause of osteoarthritis is excessive load on the joints or long-term injuries, metabolic and inflammatory factors also affect its development. Osteoarthritis usually involves weakening of the bones and tissues in the joints. Gallbladder diseases, in particular cholecystitis and cholelithiasis, provoke inflammation in the body. In cholecystitis, inflammatory mediators (e.g., prostaglandins, cytokines) are produced as a result of infection or inflammatory processes in the gallbladder. These substances increase inflammation in the joints and lead to swelling, pain, and limited movement in the joints.

DISCUSSION:

Gallbladder disease can also alter the body's metabolism. Gallbladder inflammation and gallstones can disrupt the mineral balance in bones and joints. This, for example, leads to a decrease in the absorption of calcium and vitamin D, which leads to weakening of bones and joints. These metabolic changes can affect the development of osteoarthritis. In addition, gallbladder disease can release toxic substances into the body, and these substances can damage the tissues in the joints. A number of scientific studies have aimed to study the connection between gallbladder disease and joint diseases. Studies show that the development of arthritis and osteoarthritis is accelerated in patients with gallbladder diseases such as cholelithiasis and cholecystitis. For example, inflammation in the gallbladder can lead to the development of arthritis in the joints, especially rheumatoid arthritis. In addition, gallbladder diseases can release toxic substances that damage joint and bone tissue and accelerate the development of arthrosis. Conclusion.

Gallbladder diseases, cholelithiasis and cholecystitis, can activate inflammatory processes in the body and thereby affect the development of arthritis and arthrosis. Inflammatory mediators, immunological reactions and metabolic changes accelerate degenerative processes in the joints. Thus, the role and impact of gallbladder diseases in joint diseases should be fully scientifically studied. Taking into account gallbladder pathologies in the treatment of these diseases will help to develop more effective treatment strategies.

RESULTS

Since we are talking about reduced joint mobility, the logical approach is to perform procedures aimed at increasing it. Popular non-drug methods:

Relaxation gymnastics. Specially developed physical therapy programs and exercises help strengthen the muscles around the joints, increase their flexibility and mobility, activate cell repair processes, reduce pain and inflammation. Rehabilitation exercises may include stretching, aerobics and other approaches.

Physiotherapy. Includes various procedures that have a directed or diffuse effect on the injured joint or periarticular region. We are talking about ultrasound, electro-, magnetotherapy, cold or heat effects on tissues. This relieves pain, relieves inflammation, improves blood circulation and accelerates tissue regeneration.

Massage. Tactile effects on areas of the body and limbs with damaged joints. Various massage techniques – Swedish, deep, acupuncture, etc. – relieve muscle tension, activate blood circulation, reduce pain, inflammation, and improve joint mobility.

Weight management. Excess weight is one of the main causes of joint diseases, especially hip and knee diseases. This is due to the increased weight load on them when standing, walking, and running. Therapeutic diets, weight-loss exercises, and other approaches that help normalize body weight are effective in solving joint problems. At the same time, proper nutrition involves not only preventing obesity, but also saturating the body with useful substances: vitamins, minerals, antioxidants, etc.

Avoiding adverse factors. Sitting or standing for long periods of time, a sedentary lifestyle, excessive physical exertion (for example, running or weightlifting), poor posture - in the long term, such habits have a detrimental effect on the joints, ligaments, muscle tissue and the musculoskeletal system as a whole.

Non-drug therapeutic methods are usually used in combination with other approaches, in particular, the use of drugs. This allows you to achieve a healing effect in several aspects at once.

CONCLUSION:

If you notice signs of knee osteoarthritis or other joint diseases, do not rush to self-medicate. Incompetent intervention can lead to an exacerbation of the problem. To successfully - effectively and safely solve it, seek help from a medical professional. The doctor will conduct an examination, make an accurate diagnosis and prescribe a treatment that is most suitable for your condition.

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