

New approaches to the treatment of osteoarthritis

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Osteoarthritis (OA) - chronic progressive disease joints, characterized by primary degeneration of the articular cartilage with subsequent changes in the subchondral bone and the development of marginal osteophytes, accompanied by reactive synovitis [2]. Another name for the disease is also widely used - "osteoarthritis" - due to the frequent detection of accompanying signs of inflammation. Osteoarthritis is the most common joint disease affecting both men and women; develops more often in men under the age of 45 and in women over the age of 55. Considering the fact that this disease mainly affects people over 50 years old, as well as the fact that the life expectancy of the population is increasing, it was predicted that in 2020 osteoarthritis will become the fourth most common cause of disability.

Thus, the search for new approaches to the treatment of osteoarthritis is highly relevant. Distinguish between primary and secondary OA. Primary (idiopathic) OA develops in the peripheral joints, most often in the distal and proximal interphalangeal joints of the hands (with the formation of Heberden and Bouchard nodules), the 1st carpal, 1st metatarsophalangeal, hip and knee joints, the intervertebral discs and especially the joints cervical and lumbar regions. Secondary OA develops as a result of trauma, congenital dysplasia of the musculoskeletal system, endocrine diseases (acromegaly, hyperparathyroidism), metabolic disorders (ochronosis, hemochromatosis, gout) and other diseases of bones and joints (rheumatoid arthritis, infectious arthritis, aseptic bone necrosis) [1].

Joint inflammation is also associated with the level of cytokines, which are often found in the synovial fluid of patients with arthrosis. Cytokines, in particular interleukin-1, stimulate chondrocytes and lead to an increase in the synthesis of metallo- and serine proteases. In addition, cytokines can inhibit the synthesis of the most physiological enzyme inhibitors and block the synthesis of the main matrix elements - collagen and proteoglycans. A decrease in the level of inhibitors and an increase in enzymes lead to an increase in the activity of the sum of proteases, which, in combination with inhibition of matrix synthesis, leads to cartilage degeneration and the development of arthrosis [2, 6].

The nature of pain in osteoarthritis can be continuous; aggravated by mechanical stress, at the beginning of the movement with "starting pains". The pain may increase due to the appearance of synovitis, spasm of nearby muscles.

The American College of Rheumatology (ACR) criteria for a diagnosis of hip OA requires hip pain and two of the following:

- ESR <20 mm / h;
- X-ray detectable osteophytes of the femoral head or acetabulum;
- radiographically detectable joint space narrowing (in the upper, axial and / or medial region)

We studied 36 patients with osteoarthritis of the knee and hip joints at the age of 58 ± 13.6 years, women - 22, men - 14. Of these, 12 people with synovitis of the knee joints. Pain syndrome was assessed by VAS, functional activity of joints - by Lequesne index, leukocytosis, ESR, CRP, X-ray images of patients were studied. Radiological data were evaluated according to Lestgren.

The ART method was used to determine organs with low functional activity, the presence of radiomagnetic, radiological, bacterial, viral, fungal burdens.

The patients were hospitalized, where they received NSAIDs, muscle relaxants. From the 14th day of hospitalization, BRT was added to the complex therapy according to A.A. Hovsepyan. The therapy was carried out within 6 months after discharge from the hospital with a monthly examination of the patients.

According to the research results, 16 patients had no concomitant pathology, 20 patients had arterial hypertension, 12 - metabolic syndrome, 5 - kidney damage, 6 - thyroid damage, 11 - biliary tract damage,

liver and stomach. Prior to treatment, the patients had no inflammatory parameters according to the blood test, however, the nature of pain according to the VAS and the functional activity of the joints according to the Lequesne index reflected a moderate and severe course of the process with a pronounced pain syndrome. Joint lesion of the II degree was observed in 24 patients, III - 12, osteophytosis - 9 patients.

Table 1

Change in indicators in primary osteoarthritis (n = 36)

	ESR	L	CRB	Lequesne index	YOUR
Before treatment	10.2 ± 3.5	6.2 ± 2.1	16.2 ± 2.2	nine	fifty
After 1 month.	8 ± 2.2	6.1 ± 1.4	14 ± 2.0	eight	44
After 3 months.	6 ± 0.9	5.9 ± 1.7	10.2 ± 2.5	7	40
After 6 months.	4.6 ± 1.1	5.5 ± 1.4	8 ± 2.5	4	36

In the study of ART, functional weakness in the pancreas was observed in 88% of patients, liver - 65%, small intestine - 58%, large intestine - 72%. 55% were tested for the herpes virus, 71% - Epstein-Barr, 47% - cytomegalovirus, 44% - chlamydial infection in high potencies, 33% - yersinia infection, 25% - toxoplasmosis, 28% - streptococci. All patients were tested for geopathogenic and electromagnetic loads of varying severity.

The therapy allowed to reduce pain syndrome, swelling of small joints, synovitis. After discharge from the hospital, patients were able to refuse NSAIDs - in 65% of cases, muscle relaxants - 84%, concomitant drug therapy - 64%. The effectiveness of therapy increased up to 6 months of treatment. Mild pain syndrome persisted in patients with stage III according to Lestgren.

Considering that therapy aimed at removing toxins, viruses, bacteria had a positive effect on patients with osteoarthritis, it can be assumed that this disease has an inflammatory component, which is confirmed by the data of foreign studies on the increase in these patients of pro-inflammatory cytokines [3, 4] ... The decrease in the controlled parameters reflects the positive effect of BRT on the course of osteoarthritis (Table 1).

Clinical example

Patient M., 54 years old, was admitted with complaints of morning stiffness in the joints for up to 30 minutes, pain in the knee joints, swelling of the joints of the hands. History of arterial hypertension, obesity II, impaired glucose tolerance.

Objectively: the patient has increased nutrition, stiffness of the joints of the hands, there is no redness, there is no complete closure of the hand into a fist. On examination of the knees - rotation restriction, crunching, crepitus. When examining a blood test, no pathology was revealed. Echo KG data and abdominal ultrasound did not reveal any abnormalities either.

A course of traditional therapy was carried out, including diclofenac 3.0 i / m, nise 100 mg 2 r. per day, physiotherapy, but the pain persisted.

The examination by ART revealed average reserves of adaptation, a decrease in the functional activity of the pancreas, liver, large and small intestines, cytomegalovirus, herpes virus, and yersinia virus were detected. Already after the first course of treatment, a decrease in pain was obtained, after 2 months all joints were bent, there were no pains. After the first course of treatment, the patient had a runny nose and skin rashes after the second course, which disappeared on their own after a month. The follow-up in this patient is 1 year, no pain in the joints is observed.

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