DYNAMIC CONDITION STUDY OF KNEE JOINT DEFORMING OSTEOARTHRITIS OF DIFFERENT WEIGHT LEVELS

Razzokov Farkhod Tokhir ugli – assistant
Akramov Vohidjon Rustamovich – D.M.Sc., dotsent
Bukhara State Medical Institute (Bukhara, Uzbekistan)

Annotation, *this article presents information on the characteristic of the development of pathological processes in the body of osteoarthritis of the knee joint at various levels of severity, generally recognized standards of diagnosis, treatment and medical rehabilitation of patients specific to this category, a full-fledged assessment of treatment results, assessment of their somatic condition and their medical and social status.*

Keywords: *knee joint osteoarthritis, diagnosis, treatment and medical rehabilitation of patients, somatic condition, medical and social condition.*

ТУРЛИ ОҒИРЛИК ДАРАЖАСИДАГИ ТИЗЗА БЎҒИМИ ДЕФОРМАЦИЯЛОВЧИ ОСТЕОАРТРИТЛАРНИ ДИНАМИК ҲОЛАТИНИ ЎРГАНИШ

Раззоқов Фарход Тохир ўғли – ассистент
Акрамов Воҳиджон Рустамович – D.M.Sc., доцент
Бухоро давлат тиббиёт институти (Бухоро, Ўзбекистон)

Аннотация, *ушбу мақолада тизза бўғими остеоартритининг организмда турли оғирлик даражаларида кечаётган патологик жараёнларнинг ривожланиш характеристикаси, шу категорияга хос бўлган беморларни ташхислаш, даволаш ва тиббий реабилитациясининг умум эътироф этилган стандартлари, даволаш натижаларини тўлақонли баҳолаш, соматик ҳолатини баҳолаб, уларнинг тиббий ва ижтимоий ҳолати тўғрисида маълумотлар келтирилган.*

Калит сўзлар: *тизза бўғими остеоартрити, беморларни ташхислаш, даволаш ва тиббий реабилитацияси, соматик ҳолати, тиббий ва ижтимоий ҳолати.*

ИССЛЕДОВАНИЕ ДИНАМИЧЕСКОГО СОСТОЯНИЯ ПРИ ДЕФОРМИРУЮЩЕМ ОСТЕОАРТРОЗЕ КОЛЕННОГО СУСТАВА РАЗЛИЧНОЙ СТЕПЕНИ ТЯЖЕСТИ

Раззоков Фарход Тохир угли – ассистент
Акрамов Вохиджон Рустамович – D.M.Sc., доцент
Бухарский государственный медицинский институт (Бухара, Узбекистан)

Аннотация, *в данной статье представлена информация о характеристике развития патологических процессов в организме при остеоартрозе коленного сустава различной степени тяжести, общепризнанных стандартах диагностики, лечения и медицинской реабилитации пациентов, характерных для данной категории, полноценной оценке результатов лечения, оценке их соматического состояния. состояние и их медицинский и социальный статус.*

Ключевые слова: *остеоартроз коленного сустава, диагностика, лечение и медицинская реабилитация больных, соматическое состояние, медико-социальные условия.*

Relevance. Deforming osteoarthritis is the most common disease of the musculoskeletal system. Deforming osteoarthritis of the knee joint, or gonarthrosis, occurs in 54.7-69.7% of patients with degenerative-dystrophic joint diseases, affecting up to 10-12% of the adult population, and one in three patients has a disease of both knee joints. Patients with advanced stages of the disease (stages II and III) account for up to 75%. Radiologically deforming osteoarthritis of the knee joint is detected in 25-30% of cases in people aged 45 to 64 years and in 85% of cases in people 65 years and older. The proportion of deforming osteoarthritis of the knee joint among diseases of the musculoskeletal system that caused disability is from 5.9%. Two thirds of the patients are people of working age from 40 to 60 years. 14% of patients have disability from 1 to 15 months. Gonarthrosis is a polyethological disease. A number of factors lead to the development of the disease. Injury is the most common factor causing the development of the disease. 59.84% of patients have a history of trauma. To date, conservative methods are most often used in the treatment of deforming osteoarthritis of the knee joint, the arsenal of which includes: nonsteroidal anti-inflammatory drugs and corticosteroids, which occupy the first place in the treatment of pain and reactive inflammation, chondroprotectors and synovial fluid substitutes that positively affect the restoration of the internal environment of the knee joint, metabolic therapy, physiotherapy, physical therapy and massage. Despite the large number and variety of existing treatment methods, conservative therapy is effective only in the initial stages of the disease, while in other cases it has an unstable effect and is unable to stop the progression of the disease [1.3.5.7.9.11.13.15.17].

The purpose of the study. improving the study of dynamic condition of knee joint deforming osteoarthritis of different weight levels.

Results and analyzes. This is the reason for the growing interest in surgical treatment of gonarthrosis. Many operations have been proposed for the treatment of deforming osteoarthritis of the knee joint. There are several main groups among them. These are operations aimed at eliminating the angular deformation of the limb axis, interventions aimed at restoring articular cartilage, operations that change the trajectory of the patella, intra-articular interventions (on menisci and ligamentous apparatus), knee arthroplasty, arthrodesis. None of them fully solves the problem of treating deforming osteoarthritis of the knee joint. Some authors try to solve this problem using combinations of several operations. In addition, the existing variety of treatment methods causes difficulties in choosing a treatment method for a particular patient, which in turn raises the problem of choosing surgical treatment tactics for this category of patients. There are very few works in the available literature that substantiate the tactics of surgical treatment of patients with deforming osteoarthritis of the knee joint, and they usually contain only general instructions. Thus, there are unresolved issues regarding "tactical" approaches to the treatment of deforming osteoarthritis of the knee joint (the choice of the surgical method for each patient, as well as a combination of different surgical treatment methods for one patient). All of the above was the basis for conducting this study, since the treatment of patients with deforming osteoarthritis of the knee joint is not only a medical, but also an important social task. The main provisions of the work and the developed treatment tactics were used in 351 patients with deforming osteoarthritis of the knee joint, long-term results were studied in 54.7% of patients. A study of the treatment results showed that performing several operations at the same time does not increase the length of hospital stay and the number of hospitalizations. Stage-by-stage surgical interventions lead to a statistically significant increase in the number of hospital admissions. When studying the long-term results, positive functional treatment results were achieved in 95.59% of the examined patients, which indicates the high effectiveness of the proposed treatment tactics. Thus, the widespread introduction of the proposed complex of diagnostic

and therapeutic measures in patients with deforming osteoarthritis of the knee joint into the practical activities of healthcare institutions will increase the effectiveness of their treatment, which is reflected in the improvement of functional results in the long term [2.4.6.8.10.12.14.16].

The main criterion for choosing treatment tactics for deforming osteoarthritis of the knee joint is the condition of the articular cartilage, the most informative method of examination of which is arthroscopy. When choosing treatment tactics, it is advisable to use the developed algorithm of therapeutic and diagnostic measures. The clinic of damage to intraarticular structures, stages II and III of the disease, are the basis for arthroscopy of the knee joint; with Sh-thick chondropathy, interventions on articular cartilage are indicated; damage to the patellofemoral joint by deforming osteoarthritis, the presence of persistent pain syndrome are indications for patellar laterolysis; in the presence of angular deformity of the knee joint, accompanied by the progression of pain syndrome and the lack of effect from conservative treatment, corrective osteotomy is indicated. With delimited defects of articular cartilage (up to 4 cm), bone-cartilaginous mosaic plastic surgery is the optimal treatment method for patients with deforming osteoarthritis of the knee joint. To obtain grafts, it is advisable to use the developed device for taking cylindrical bone and cartilage grafts. In case of large defects of articular cartilage (more than 4 cm) in patients with deforming osteoarthritis of the knee joint, it is recommended to use abrasive chondroplasty or tunneling of the subchondral bone, lavage of the joint cavity. Simultaneous surgery does not increase the length of hospital stay and reduces the number of hospitalizations for patients who require multiple surgical procedures. The developed complex of therapeutic measures improves the functional condition of the affected knee joint in 95.59%, and stops the progression of the disease by stages in 94.74% of the examined patients.

Conclusion. It is advisable to supplement clinical and X-ray examination of patients with deforming osteoarthritis of the knee joint with arthroscopy of the knee joint. Careful selection of patients for bone-cartilaginous mosaic plastic surgery for deforming osteoarthritis of the knee joint with a defect in articular cartilage is necessary. Surgical treatment of patients with deforming osteoarthritis of the knee joint should be carried out individually and differentially, based on the data obtained as a result of the examination. When choosing treatment tactics, it is advisable to use the proposed algorithm of therapeutic and diagnostic measures. If it is necessary to perform several surgical interventions in patients with deforming osteoarthritis of the knee joint, it is advisable to perform operations simultaneously. It is advisable to treat patients with deforming osteoarthritis of the knee joint in specialized departments that have arthroscopic equipment at their disposal.

LITERATURE

1. Albertsen, J.L. Magnetisk resonansundersogelse af knaeleddet efter traume med intraartikulaer ansamling / J.L. Albertsen, L. Barfred, N. Egund // Ugeskr Laeger. 1996. - V. 158, N 29. - P. 4199-4200.

2. . Babis, G.C. Double level osteotomy of the knee: a method to retain joint-line obliquity. Clinical results / G.C. Babis, K.N. An, E.Y. Chao // J Bone Joint Surg Am. 2002. - V. 84; A(8). - P. 1380-8.

3. Calvert, G.T. Wright. The use of arthroscopy in the athlete with knee osteoarthritis / G.T. Calvert // Clin Sports Med. 2005. - V. 24(1). - P.133-52.

4. Choi, H.R. High tibial osteotomy for varus gonarthrosis: a 10- to 24-year follow-up study / H.R. Choi, Y. Hasegawa, S. Kondo // J Orthop Sci. -2001. — V.6(6). P.493-7.

5. Devgan, A. Medial opening wedge high tibial osteotomy for osteoarthritis of knee: long-term results in 50 knees / A. Devgan, K.M. Mary a // Kundu Med J Malaysia. 2003. - V.58(l). - P.62-8.

6. Erdogan, F. The use of a modified Weber technique for high tibial osteotomy / F. Erdogan, H. Kesmezacar, T. Ogut // Acta Orthop Traumatol Turc. 2003. - V.37(l). - P.26-32.

7. Hangody, L. Autologous osteochondral mosaicplasty. Surgical technique / L. Hangody, G.K. Rathonyi, Z. Duska // J Bone Joint Surg Am. 2004. -V.86, Suppl l.-P-.65-72.

8. Huang, T.L. Do we get a "real" alignment of knee in the preoperative planning of high tibia osteotomy: a prospective study of reproducibility / T.L. Huang, H.T. Wu, J.C. Liu // Chin Med Assoc. 2004. - V.67(4). -P.185-8.

9. Imhoff, A.B. Corrective osteotomy in primary varus, double varus and triple varus knee instability with cruciate ligament replacement // Orthopade.2004.-V.33(2).-P.201-7.

10. Jakob, R.P. Closing wedge osteotomy of the tibial head in treatment of single compartment arthrosis / R.P. Jakob, M. Jacobi // Orthopade. 2004. - V.33(2). -P.143-52.

11. Kawakami, H. Gait analysis system for assessment of dynamic loading axis of the knee / H. Kawakami, N. Sugano, K. Yonenobu // Gait Posture.2005. V.21(l). -P.125-30.

12. Labek, G. Minimally invasive medial unicompartmental knee replacement / G. Labek, N. Bohler // Orthopade. 2003. - V.32(6). - P.454-60.

13. Marti, C.B. Accuracy of frontal and sagittal plane correction in open-wedge high tibial osteotomy / C.B. Marti, E. Gautier, S.W. Wachtl // Arthroscopy.- 2004. V. 20(4). - P.366-72.

14. Naudie, D.D. Opening wedge high tibial osteotomy for symptomatic hyperextension-varus thrust / D.D. Naudie, A. Amendola, P.J. Fowler // Am J Sports Med. 2004. - V.32(l). - P.60-70.

15. Parvizi, J. Total knee arthroplasty following proximal tibial osteotomy: risk factors for failure / J. Parvizi, A.D. Hanssen, M.J. Spangehl // J Bone Joint Surg Am. 2004. - V.86-A(3). - P.474-9.

16. Yoshino, N. Total knee arthroplasty with long stem for treatment of nonunion after high tibial osteotomy / N. Yoshino, S. Takai, Y. Watanabe // J Arthroplasty. 2004. - V. 19(4). - P.528-31.

17. Zhou, Y.X. Long term follow up of patients with knee osteoarthritis after high tibial osteotomy / Y.X. Zhou, L. Yao, Q. Kang // Zhonghua Yi Xue Za Zhi. 2003. - V.25;83(22). - P. 1949-51.