

KNEE AND SHOULDER ARTHROPLASTY, SURGICAL PROCEDURE PRE- AND POST-TREATMENT MEASURES**Turdaliyev Murodjon Mirkomiljon ugli**

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zafarbekkambarovkuaf@gmail.com**Abstract**

This article describes the practice of knee and shoulder arthroplasty surgery. During the consultation, the doctor will determine the indications and contraindications for arthroplasty. Knee arthroplasty is a very precise surgical procedure, the goal of which is to restore you to pain-free movement, allowing you to return to your normal life. Shoulder arthroplasty is an effective and often the only way to restore lost arm function .

Before surgery, the patient undergoes a complete clinical examination, Surgery. In standard cases, artificial joint implantation. During the operation , partial removal of bone tissue is performed by opening the capsule of the knee joint and exposing the articular surfaces of the bones. After the operation.

In the postoperative period, antibiotics, painkillers, and symptomatic treatment will continue. Discharge from the hospital. Rehabilitation activities should be continued, strictly following the recommendations of the surgical operation.

Keywords

Knee arthroplasty, Shoulder arthroplasty, prosthesis, endoprosthesis, intensive therapy, rehabilitation.

Introduction. Knee arthroplasty is a very precise surgical procedure, the purpose of which is to Pain-free return to movement, allowing you to return to your normal life. Knee arthroplasty, when knee degeneration is so severe that joint-preserving intervention is no longer beneficial.



Like a normal knee joint, the artificial one completely repeats the elements of the normal joint and provides the necessary range of motion. The appropriate prosthesis is selected for each specific case. The center performs endoprosthetics of the knee joints with modern implants from leading manufacturers in the world.

Consultation . During the consultation, the doctor will determine the indications and contraindications for arthroplasty, conduct the necessary studies and select the appropriate prosthesis. X-ray examination will allow you to determine the degree of joint damage, take the necessary measurements. Be sure to warn the surgeon about the possible risks and complications. Complications of the operation include :

- infection in the surgical area
- blood loss during or after the operation
- thromboembolism (blockage of a blood vessel by a blood clot)

Before the operation. Before the operation, the patient undergoes a complete clinical examination (tests, consultation with specialists, examination by an anesthesiologist). The patient is hospitalized 1-2 days before the operation.

Operation. In standard cases, the implantation of an artificial joint lasts 2 hours. During the operation, after opening the capsule of the knee joint and exposing the articular surfaces of the bones, partial removal of bone tissue is performed. The back surface of the patella (patella) is also removed. In this case, the tendon structures of the joint (lateral and cruciate ligaments) remain unaffected. To improve the functioning of the knee joint, the surgeon can restore the integrity of the tendons that strengthen the knee joint.

In addition, artificial pads are installed on the prepared surfaces of the bones that form the knee joint. The shape of the endoprosthetic pads corresponds to the shape of the articular surfaces of the knee joint, so the range of motion in the prosthetic joint is the same as in a normally functioning knee joint. After the operation, before suturing, a drain is installed in the wound, through which the contents of the wound (blood, exudate) will drain. During the operation, measures are taken to drain the wound in order to prevent infectious complications, if necessary, to replenish blood loss, and to prevent blood clots.

After the operation, the patient is transferred to the anesthesiology and intensive care unit.

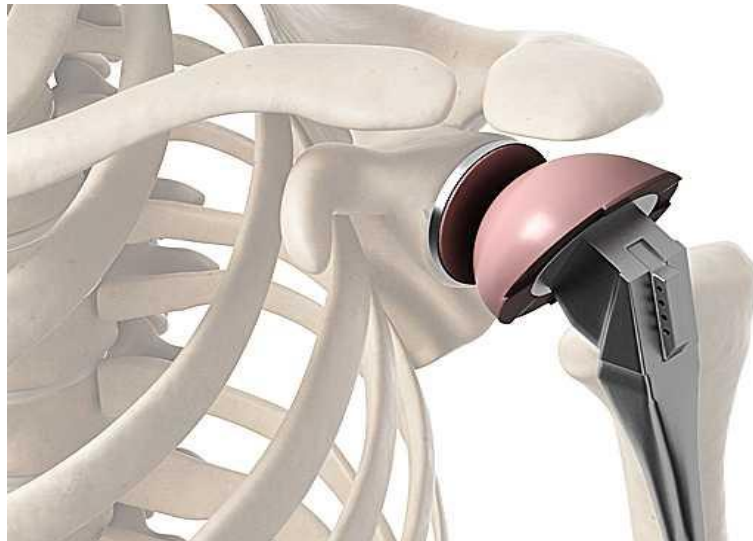
After surgery. In the postoperative period, antibiotics, painkillers, symptomatic treatment continue. On the first day after surgery, bed rest is allowed. From the second day, you can sit up in bed, start static exercises for the muscles of the limbs , and do breathing exercises. From the 3rd day, you can walk on the operated limb with a dosed load and additional support (crutches, arenas). Physical exercise is very important and reduces the risk of complications such as thrombosis, etc. later, intensive therapeutic exercises are performed, which help strengthen the muscles and improve mobility. Stitches are removed for 10-12 days .

Discharge from the hospital . Discharge is carried out 10-12 days after the operation. Rehabilitation measures should be continued, strictly following the recommendations of the surgeon. If necessary, hospitalization for recovery under the guidance of rehabilitation specialists is possible. Physical activity restrictions on the operated limb should be observed for 6 weeks after the operation , during which time it is recommended to use additional support. Walking with a cane starting from 4-5 weeks.

Physical activity (e.g., jumping, running), which involves heavy lifting and/or subjecting the prosthesis to shock and /or increased stress (e.g., heavy physical activity, marathons, etc.), may

reduce the success of the surgery and the duration of the implant's life . Even if no pain occurs , the artificial joint should be checked regularly by a doctor.

Shoulder arthroplasty is an effective and often the only way to restore lost arm function . As a result of this operation, all functions of the shoulder joint are restored and pain in the shoulder disappears.



The appropriate prosthesis is selected for each specific case. Depending on which part of the joint is replaced, shoulder joint endoprotheses are total and unipolar.

Unipolar prostheses are implants that replace only one element of the joint, usually the humeral head.

Total shoulder arthroplasty involves the replacement of all elements of the joint, namely the humeral head and the glenoid cavity of the scapula. The prosthetic design consists of a head, a neck , and a shaft of various types and sizes. Shaft prostheses are available for cemented or cementless anchorage .

Consultation. During the consultation, the doctor will determine the indications and contraindications for arthroplasty, conduct the necessary studies and select the appropriate prosthesis. X-ray examination will allow you to determine the degree of joint damage, take the necessary measurements. Be sure to warn the surgeon about the possible risks and complications. Complications of the operation include :

- infection in the surgical area;
- blood loss during or after the operation;
- thromboembolism (blockage of a blood vessel by a blood clot);
- dislocation of the prosthesis, which will require an increase in the duration of treatment.

Before the operation. Before the operation, the patient undergoes a complete clinical examination (tests, consultation with specialists, examination by an anesthesiologist). The patient is hospitalized 1-2 days before the operation.

Operation. In standard cases, artificial joint implantation lasts 2 hours. During the operation, measures are taken to prevent infectious complications, if necessary, to replenish blood loss, and to drain the wound in order to prevent blood clots.

After the operation. In the postoperative period, antibiotics, painkillers, and symptomatic treatment continue. The upper leg is fixed in a handkerchief bandage .

Rehabilitation in the hospital. Activation on the 1st day after surgery. From the second day, you can start static exercises for the muscles of the hand. During the first week after surgery, the hand with the prosthesis can only perform passive movements (not voluntarily, but with the help of a physiotherapist or a healthy hand). Then the patient is allowed to perform active movements, but with the help of a healthy hand. From the 15th-18th day after surgery, you can begin to perform active movements with a slight load. The use of a special set of exercises allows you to achieve a significant amount of movement during the discharge. Physiotherapy is being carried out. Stitches are removed for 10-12 days.

Discharge from the hospital. Discharge is carried out 10-12 days after the operation. Rehabilitation measures should be continued, strictly following the recommendations of the surgeon. If necessary, hospitalization for recovery under the guidance of rehabilitation specialists is possible. It is recommended to wear a scarf or shoulder strap for the first 3 weeks after surgery. Restriction of physical activity on the operated limb should be observed within 4-6 weeks after surgery. Swimming pool training is scheduled for 8 weeks after surgery. Physical education and sports are allowed 3 months after surgery without restrictions.

Conclusion. The prevalence and causes of coxarthrosis are presented in this review. Many scientists devote their research to the epidemiology of osteoarthritis. Data on the incidence and causes of coxarthrosis are rare.

The level of orthopedic diseases is growing every year and has a negative impact on the health of the population, which is manifested in an increase in their prevalence, an increase in the share of temporary and permanent disabilities, and the onset of disability. Over the past decade, diseases of the musculoskeletal system have been steadily increasing in all age groups. Prevention of bone and joint diseases and injuries, early diagnosis and treatment of such diseases are urgent problems of world medicine. Scientists of our country are also conducting their own scientific research in this area. As a result, a new method has been introduced in traumatology of our country - bipolar endoprosthesis. As is known, until now, certain types of hip endoprosthesis, including total and revision methods, have been used in our medicine. Now, bipolar endoprosthesis of the hip joint has also been added to them. The uniqueness of this method is that after opening the joint, only the damaged part of the femur is removed and replaced with an endoprosthesis.

Literature.

1. Shostak NA, Pravdyuk NG, Klimenko AA Osteoarthritis and related pathology - clinical and pathogenetic relationships // Breast cancer. Medical review, 2019. - 11(II).
2. Zagorodny NV Replacement of the thigh. Fundamentals
3. Averkieva Yu., Grigorieva II, Raskina TA Bone mineral density in elderly and middle-aged women with osteoarthritis of the knee and hip joints // Modern Rheumatology, 2020. - No. 14 (1).
4. Clinical recommendations "Coxarthrosis". Developed by: Russian Association of Traumatologists and Orthopedists, Russian Association of Rheumatologists, Russian Association of Rehabilitation Physicians. – 2021.
5. Shostak NA Coxarthrosis and periarticular pathology of the hip region - features of clinical manifestations, diagnostics, approaches to therapy. Modern rheumatology, journal. No. 1, 2012. pp. 15-21.
6. Alekseeva LI Updating clinical recommendations for the treatment of patients with osteoarthritis // RMJ, 2019. - No. 4. - P. 2-6