

Stages of rehabilitation after endoprosthesis of ankylosed hip joints

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Abstract:The rehabilitation developed by us was carried out in 50 patients. Main group 25 and control group 25 patients. The period before the operation lasts 3-4 days. Period of operation. After the operation, the patient remains in the intensive care unit for 24 hours and receives: antibacterial drugs (antibiotics) to prevent the development of infection; anticoagulant drugs from venous thrombosis. After the surgery, a 2-3 week period of treatment and recovery began for both groups of patients. In the main group, special therapeutic exercises developed by us for the rehabilitation of patients were used and performed in a soft mode. In the control group, exercise therapy was carried out in a group or the patients independently performed the exercises recommended by the exercise therapy doctor. The stepwise rehabilitation treatment method developed by us after ankylosing hip arthroplasty improves the treatment results.

Key words:Hip joint, after total arthroplasty, joint ankylosis, orthopedics, contracture, rehabilitation, prevention, dislocation of endoprosthesis head

Introduction:

Rehabilitation of patients after arthroplasty of ankylosed hip joint includes the following main points: Creating optimal conditions for his active participation in society, as well as improving the quality of life of patients. Medical rehabilitation of patients with ankylosed hip joints after arthroplasty includes the following stages: inpatient, outpatient, sanatorium and resort. The stage of inpatient rehabilitation includes preoperative rehabilitation and surgical treatment.

HJ after EP is divided into two stages: From the time of operation to 3 weeks - this is the early stage and from 3 weeks to 10 weeks - the late stage. At this time, rehabilitation tasks and exercises should be performed effectively after HJ EP by the surgeon and rehabilitation specialist. During the sanatorium-resort stage, patients underwent physical exercises and physiotherapy courses in sanatorium-resort conditions every year for 3 years.

Carrying out rehabilitation measures strengthens the result of surgical intervention.

Surgeons and all authors do not recommend bringing the limb from internal rotation of the hip during exercise to prevent dislocation of the endoprosthesis head. Carrying out rehabilitation measures strengthens the result of surgical intervention after hip arthroplasty. Surgeons and all authors do not recommend bringing the limb with internal rotation of the femur during exercise to prevent dislocation of the endoprosthesis head.

In the case of HJ AN, postoperative rehabilitation of patients is of great importance to achieve good results after HJ TE. According to Karpukhin, A.O. (2014) the main task of this period is to restore and strengthen the function of the hamstrings through development and exercise therapy. Rehabilitation after hip replacement at home and in the hospital is a long and difficult process that requires strength and patience. But his ability to work with proper organization will return by the end of the 10th week. With a complex course of postoperative stages, recovery after hip replacement can take 2 times longer.

According to Asilov S.U., Akramov V.R.(2021), rehabilitation of patients with aseptic necrosis of the femoral head after arthroplasty involves the following main points: One of the main points of rehabilitation of patients after TE with ankylosed HJ. The second point emphasized by the author is to create optimal conditions for his active participation in the life of society, as well as to improve the quality of life of patients.

The author V.R. Akramov (2011) noted that in order to prevent joint diseases, it is necessary to regularly do sports and perform exercises to strengthen muscles.

corset, timely treatment of inflammatory processes of joints, preventive massage [8].

In the early stages of the disease, physical therapy treatments can help increase range and restore the joy of movement. Rehabilitation in joint ankylosis Fibrous ankylosis with small adhesions can be managed conservatively, physiotherapy, kinesiotherapy and osteopathy are used to normalize the situation. Helps to recover faster after surgery: physiotherapy exercises, massage, acupuncture, physiotherapy procedures, mud therapy, etc.

Kerstin Kujath et al., Severe disease activity and complications of immunosuppressive therapy: a problem of emergency hospital rehabilitation in rheumatology after HJ TE surgery in AN. According to the authors, acute rehabilitation means multidisciplinary rehabilitation treatment of patients who always need complex urgent and long-term rehabilitation care. As a result of advances in acute rheumatology and improvements in emergency medical services, the number of patients is increasing, with episodes of severe disease and complications of immunosuppressive therapy [41]. Such patients need not only acute treatment, but also special multidisciplinary acute rehabilitation, which begins as early as possible during hospital stay. The authors performed emergency rehabilitation after HJ in a 21-year-old woman with systemic lupus erythematosus and 14 laparotomies due to severe acute pancreatitis and multiple bowel perforations. Emergency rehabilitation was complicated by a large abdominal wall defect and severe polyneuropathy. The researchers show the differences between acute and long-term rehabilitation, describe the mobilization of patients in acute rheumatism units, and identify specific problems that arise in the emergency rehabilitation of rheumatology patients in the hospital.

Authors Shorin (2018) Medical rehabilitation of patients with HJ after arthroplasty includes the following stages: inpatient, outpatient, sanatorium and resort [3]. The researchers noted that the inpatient rehabilitation phase should include preoperative preparation of patients and surgical treatment. After EP, HJ is divided into two stages: The first stage is from the time of operation to 4 weeks. From 4 weeks to 12 weeks - there is a late stage. In the evening phase, patients completed rehabilitation tasks and exercises after HJ EP by the surgeon and rehabilitation specialist.

According to the authors, patients should stay in sanatorium-spa conditions for 3 years, and also receive physical exercises and physiotherapy every year.

Researchers Hamraev Sh.Sh., Karimov M.Yu. (2013) noted that patients should actively perform general strengthening exercises in the postoperative period of HJ TE and normalization of the neuromuscular apparatus of the operated limb [37]. In order to restore the operated joint and prepare for full loading, the authors show that the patients should gradually maximally mobilize the tendons, muscles, bursal-ligamentous apparatus that contribute to stability and balance, adaptation to life. [7, 8, 11, 18, 35].

It was the purpose of our work: Improving surgical outcomes after arthroplasty for femoral neck fractures by developing rehabilitation techniques.

Materials and research methods. The rehabilitation developed by us was carried out in 50 patients 25 main group and 25 patients control group. The period before the operation lasts 3-4 days. Period of operation. After the operation, the patient remains in the intensive care unit for 24 hours and receives: antibacterial drugs (antibiotics) to prevent the development of infection; anticoagulant drugs from venous thrombosis. Also against the pain of the prevention of inflammation of non-steroidal anti-inflammatory drugs; protein and calcium supplements to accelerate the regeneration of bone and muscle structures. After the surgery, both groups of patients begin a period of treatment and recovery, which lasts 2-3 weeks. In the main group, special therapeutic exercises are carried out for the rehabilitation of patients in a soft mode. In the control group, physical exercise therapy was carried out in a group with independent exercises by the patient recommended by the doctor. We have developed a list of special exercise therapy exercises after ankylosing hip surgery. After the operation, the operated limb was removed for 20 (with the help of a splint between the legs developed by us. After the operation, both legs were immediately tied with an elastic bandage to prevent thrombosis of the veins of the lower legs. On the 2nd day, taking into account the weight of the patient, the bed was allowed to lose blood. It was raised 1-2 times for 10-15 minutes as much as possible, and the condition was determined by the patient's well-being. The main position is lying on the back with abduction of the operated limb by 20 (The patient was allowed to lie on the healthy side with a pillow or splint between the legs. On the 3rd-4th day after the permanent elastic bandaging of the legs, it was allowed

to sit in bed with external help. They could also stand with a splint between their legs and walk with crutches in bed with or without limited support on the operated limb. On day 4-5, patients began to move around the operated limb with or without support on crutches placed between their legs with the help of an exercise therapy instructor. On the 6-7th day, the operated limb was allowed to move independently with the help of crutches with splints between the legs with limited weight. On day 8-9, patients began to walk up to 150 m along the corridor with 50% light weight bearing with crutches and a splint between the legs. On the 8-13th, they were allowed to climb one flight of stairs. Sutures were removed after the surgical wound on 14-15 days. Patients were taught self-care skills such as walking with a brace and without a splint between their legs. For efficiency, the rehabilitation methods developed by us were tested on the Coordination-speed test, which serves to determine the coordination-speed capabilities of patients to determine the severity of asymmetries between the operated and non-operated limbs.

Method: The coordination-speed test was performed before the operation, on 3-5 days and before discharge (13-14 days of the postoperative period). In this case, it is necessary to move as much as possible within the specified time - 10 s (leg abduction, forward and backward steps). The test allows you to assess the level of readiness for movement of various muscle groups, which is most important in the postoperative period. This test shows the condition of the muscular system, also allows to evaluate the performance of periarticular muscles, allows to control the determination of the severity of asymmetries between the operated and non-operated limbs, and is safe. Before surgery, the difference in the number of movements within 10 seconds after surgery was evaluated. When performing the test with the operated and non-operated leg, the hip abduction index increased the most after the operation. Coordination test data showed that on the 14th day in the operated leg, this figure was equal to 13.5 m of movement in the main group and 10.8 m of movement in the control group, which is 25.3% worse than in the main group. This indicator shows positive changes in the operated joint, shows the functioning of the gluteal muscles, which is the most important from the point of view of preventing the dislocation of endoprostheses. The obtained data show that the results for all parameters are better in the main group compared to the control group, and the difference in the dynamics of indicators is clearly visible. Thus, gradual rehabilitation after arthroplasty of ankylosed hip joints improves treatment results and reduces disability. In conclusion, we can say that the analysis of the scientific literature data on HJ AN shows that currently there are many scientific works on its etiopathogenesis, clinical classification, as well as surgical treatment, indications and contraindications for TE, postoperative rehabilitation of patients with this disease. Despite most of the accumulated experience of TE HJ, the immediate and long-term results of surgical treatment related to patients' capabilities have not been sufficiently studied. The instability of endoprostheses, as well as the insufficient study of postoperative errors and complications, indicate and demonstrate the need for an in-depth analysis of scientific work. Currently, there is a sufficient amount of scientific work on ankylosed HJ, but it has not been sufficiently studied with clinical signs using modern research methods. With a new method of surgical treatment, it is necessary to take into account the risk of developing errors and complications. It is not yet possible to expand the guidelines for the step-by-step rehabilitation of postoperative patients when performing surgical treatment using new technologies.

Thus, fibrous ankylosis with small adhesions during rehabilitation before surgery can be performed conservatively, physiotherapy, kinesiotherapy and osteopathy are used to normalize the situation. The following will help to recover faster after surgery: physical therapy exercises massage acupuncture physiotherapeutic procedures mud treatment etc. After surgery, we have developed the "Hip joint rehabilitation device" for the rehabilitation of patients. The device developed by us is designed for the rehabilitation of ankylosis patients.

Conclusion:

1. The stepwise rehabilitation treatment method developed by us after arthroplasty of ankylosed hip joint improves treatment results.
2. A differential approach to the rehabilitation of patients after arthroplasty of ankylosed hip joint reduced the duration of rehabilitation and disability.

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