

Exercises for Rehab After Hip Arthroscopy

Physical Therapy in Twin Falls and Buhl for Hip

We hear a lot about knee arthroscopy but hip arthroscopy is a reality in the orthopedic world, too. Placing a scope in the hip joint and performing procedures like removing tissue or loose bits of cartilage inside the joint is also a common procedure. Hip arthroscopy is probably used most often among sports athletes.

Like knee arthroscopy, hip arthroscopy is followed by a postoperative rehab program. The goals are to reduce pain and restore normal hip motion, strength, flexibility, and ultimately, function. In this article, guidelines for rehabilitation from start to finish are provided.

This progression of the rehab program starts before surgery with patient education. It continues until the athlete returns to the playing field. A Physical Therapist supervises and directs each program.

Sometimes a simple home program with occasional follow-up appointments is all that's needed. But in other (more complex) cases, the patient is better off coming into the clinic where the right equipment is available.

In all cases, following hip arthroscopy, the athlete is guided through four phases of rehabilitation: 1) mobility and initial exercise, 2) intermediate exercise and stabilization, 3) advanced exercise and neuromotor control, and 4) return to activity. Each of these phases is discussed in detail with photos of the many exercises included. Let's take a quick look at each one.

First phase. The patient has just had the arthroscopic procedure. So the first step is to protect the healing tissue while maintaining motion. Patients are usually encouraged to get rid of the crutches within the first week, put as much weight on the foot as possible, and walk with a normal gait pattern (without limping).

During the early postoperative days, the therapist will assess the muscles and look for reflex muscle inhibition. There is a well-known pattern of decreased muscle contraction of the gluteus medius (buttock) muscle in response to the surgery (and pain). The body's intent is to protect the leg but this phenomenon must be stopped before it interferes with movement.

Phase one also includes exercises to restore normal joint motion, prevent scar tissue build up, and stretch the joint capsule. The joint capsule is a fibrous covering over and around the hip joint. It acts to stabilize or hold the hip in the socket. In the process of gaining access to the joint arthroscopically, the capsule is often punctured or cut. Healing and recovery require maintaining flexibility and stability of the joint capsule at the same time.

Throughout the discussion of all four phases of post-arthroscopic surgery rehab, specific exercises and when to use them are presented in this article. A major focus is on the gluteal (buttock) muscles (gluteus medius and maximus). Therapists are encouraged to progress the program based on type of surgery, patient tolerance, and results of muscle testing.

Phase two begins when the patient has full hip motion, can walk normally without crutches, and has no pain (or only mild pain). The average athlete gets to this point about one month after surgery. In this phase, muscle imbalances are addressed and hip range-of-motion is continued with strengthening exercises added.

It's at this point that the therapist also takes a look at the work of the trunk and pelvis on either side of the hip. Strength, power, and endurance of these muscles are important to hip function. Four tests of core stabilization are presented (pelvic tilt test, pelvic rotation test, torso rotation test, and hip bridging with leg lifts).

Now the athlete moves into phase three and works on restoring normal proprioception (sense of joint position). Work continues on core stabilization with normal, balanced muscle contraction/relaxation. All of the exercises in this phase work to help restore normal motor control. Balance and strength activities are progressed using balance devices like the minitrampoline, as well as pool therapy.

By now, the athlete should have normal functioning gluteal muscles, good balance on one-leg, and be able to perform minisquats and single heel raises. Exercises are done with the feet planted on the ground (closed-chain) and with the feet off the ground (open-chain exercises).

In the last and final phase, the athlete is prepared to return to his or her pre-injury level of play. Here the therapist incorporates exercises that mimic the type of movements needed by the athlete based on type of sports participation and position played. The timing of this phase is most dependent on what kind of surgery was done and how long the healing tissues must be protected.

So, this is the proposed rehab program for athletes post-hip arthroscopy. How well do these exercises work? Well, the evidence to support the specifics of this progressive program has not been researched yet. That's the next step.

Each phase must be tested and proven necessary. The protocol has been put together based on what we do know so far about the hip arthroscopic procedure. It's up to the research community to take a closer look now. It will be necessary to conduct before and after tests in each phase with each exercise or step in the rehab process. Only then will we have the evidence we need to support this approach to rehab following hip arthroscopic procedures.

Reference: Michael L. Voight, DHSc, et al. Postoperative Rehabilitation Guidelines for Hip Arthroscopy in an Active Population. In Sports Health. May/June 2010. Vol. 2. No. 3. Pp. 222-230.