Sports Medicine
University of Colorado

2150 Stadium Drive
Boulder, CO 80309
303-315-9900
Fax: 303-315-9902

1635 North Aurora Court
Aurora, CO 80045
720-848-1900

2000 South Colorado Blvd.
Colorado Center Tower One, Suite 4500
Denver, CO 80222
720-848-8200

Omer Mei-Dan, MD
Cecilia Pascual-Garrido, MD

REHABILITATION FOLLOWING ARTHROSCOPIC HIP SURGERY

POST-OP: DISCOMFORT, WOUND CARE, & ROM (range of motion)

Most patients find that the worst pain is the first 2-3 hours after the surgery. Even so, this is "moderate" rather than severe. It is usually well controlled with pain medication. By the next morning many patients rate their pain as 1 or 2 out of 10; usually it feels no worse than a dull ache.

The puncture wounds tend to ooze for 24-36 hours. This is because a large volume of saline enters the hip and surrounding tissues during the procedure. This fluid escapes as a bloodstained, watery fluid. The water-proof dressings in place at the time of discharge from the hospital frequently need changing several times during the first 24 hours, and as frequently as needed for the first several days. However, the steri strips covering the incisions should not be removed, even if wet or starting to peel off.

We also ask you to avoid rolling your hip out (external rotation) for 4 weeks post op.
You will likely need help with dressing yourself, specifically putting on and taking off socks or shoes, as the figure-four position used when doing this yourself is not recommended.

CRUTCHES & WEIGHT BEARING

Crutches are used for one to six weeks after your surgery, depending on the repair that is done in your hip. Post-op weight-bearing (WB) status is determined during your operation and is based on your anatomy as well as the work performed during the procedure. If it is unclear what your WB status is, please call our office for clarification.

WB status will be stated in your discharge paperwork together with additional post op recommendations. Of note, we prefer patients use two crutches in order to walk in a symmetric pattern rather then to use one crutch which results in a subsequent lean.

Proper technique, using BOTH crutches

One crutch: Please avoid!

Once you have been cleared for full WB, it is advisable to continue to use the crutches when walking long distances (>200 yards) or if your hip feels inflamed and sore. This is only until you get strong enough, usually 6-8 weeks after surgery.

STARTING REHAB: CYCLING

The first and easiest exercise is cycling on an upright stationary bike. (NO recumbent bike please!) This should happen as early as the night of your surgery, but no later than 36 hours post op.

Set the seat post high (so as to avoid bringing your hip into deep flexion while pedaling), sitting in an upright position with high handlebars. Cycle without resistance on the bike for the first 5 weeks, as your hip capsule is healing. Pedaling that requires too much effort may stretch the healing capsule too soon after your surgery, thus compromising optimal healing. Keep the cadence high (at 80-90 revolutions per minute) with no to little resistance.

Your first session on the bike should not be more than 5-7 minutes. On the second post-op day, begin cycling twice, once in the morning and again in the evening, for 5-7 minutes each session. Every second or third day thereafter, incrementally increase the time cycling during each session by 10-15% until you are riding 30 minutes twice a day. If your hip joint is sore the following day, scale back for a day (or two).

STITCH REMOVAL & WATER THERAPY

We will remove your stitches at the first post op visit, usually 12-18 days after the operation. At that time, we will advise you as to when the wound will be given clearance (usually NOT sooner than 3-4 weeks after your surgery date), to begin pool therapy. At that point, a good first water exercise is walking slowly in chest deep water. You can progress to walking in

waist deep water, as your hip tolerates the progression.

Deep water running with a flotation belt is also good. It is best to start by treading water gently and work towards a full running stride over 2-3 weeks. Free style swimming can be started at this point with a pool buoy between the thighs so the pelvis is in line with your upper body (so as to not sink into the pool) and the hips are not over-extended, while the feet are doing a minimal amount of kicking. Breaststroke is not to be initiated before 4-5 months, and only after clearance from us.

If the hip is a bit sore afterwards, but fine within 24-36 hours, then continue with the plan. If the hip pain is sharp and unpleasant or is still sore the next day, then back off.

WEIGHT TRAINING & CORE WORK

Core exercises (abdominal and back muscles) can start at 10-14 days post op. Take care to not exceed the limitations on ROM that are in place for the first 5 weeks after your surgery, mainly avoiding hip extension, hip external rotation and hip flexion past 90 degrees.

Upper body weights can be introduced ten days after your surgery. It is best to use machines rather than free weights in the first 3-4 weeks, to allow time for your balance to improve.

Leg press can commence at 4 weeks post op, for the highly conditioned athletic population, with minimal weight/resistance. Keep the press and squats shallow to avoid deep hip flexion.

Throughout all exercises, it is important to maintain a stable pelvis. Pelvic instability and obliquity can change the manner in which the muscles are recruited and used. It is crucial to work with your PT, especially during the early period, to ensure that you are utilizing proper technique.

RUNNING: WHEN & HOW TO PROGRESS

Running involves impact loading. Therefore, the earliest we would recommend that you initiate running is around 10-12 weeks post-op. If there is significant cartilage damage to the hip socket then we will likely recommend avoiding running for 6 months or longer. Fortunately, this is uncommon.

Because bone is usually removed from the femoral neck, there is a theoretical risk of stress fracture of the femoral neck. The amount of bone removed is small (so this is very uncommon), but at times this would dictate the need for 6 weeks of partial weight bearing with crutches after surgery.

Once running commences, start running on flat, soft surfaces with good shoes. We will discuss a running plan with you in clinic and/or will have you work with your physical therapist to develop a proper running regimen.

SETBACKS

Hip rehab is not linear. There will be setbacks when the hip becomes more painful and "grumpy". You must be prepared to reduce training and give the hip a rest. Acetaminophen and/or an anti-inflammatory medication may be necessary.

Setbacks can occur at any time in the first 18 months. The capsule of the hip joint must heal

from the large deep incision used to gain access to the hip joint. The two puncture holes in the skin do not indicate the amount of surgery performed at the level of the deep tissues. As the capsule heals it may become irritable. Patients may find stretching and end-range movements painful. A simple breaststroke kick can be very sore. For most, this reduces quickly and the hip feels very comfortable by 4 months. Later capsule-related setbacks happen after full return to activity. These are typically initiated by a sharp move, which can be associated with an audible snap, 6-12 months post surgery. It usually takes 3-7 days for that setback to resolve spontaneously.

NEW RANGE OF MOTION

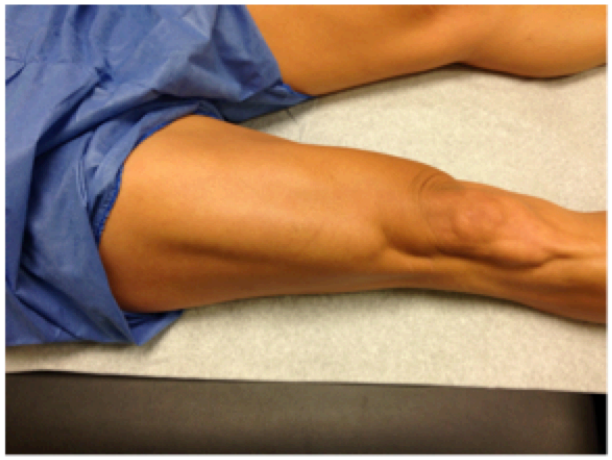
By removing bone from the femoral neck, extra hip internal rotation and flexion can be achieved. For many patients the hip will rotate more than it has since they were adolescents. The muscles will not be accustomed to this new range of motion and the new movement will need to be practiced and "imprinted".

Isometric quadriceps tightening and hip IR/ER work can be started as early as 2 weeks after your surgery but require help from an assistant, which may include your PT or a loved one.

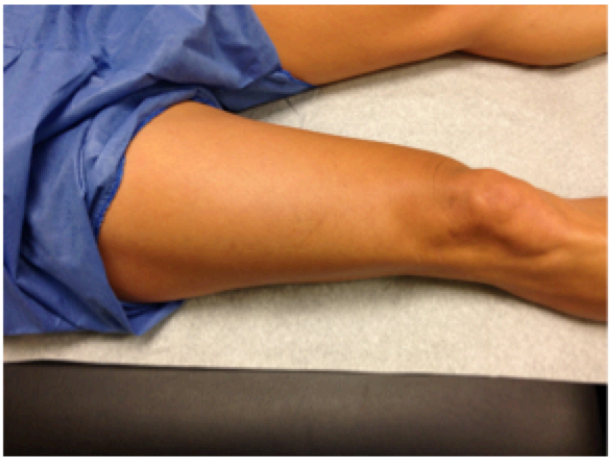
For the first 3-4 weeks post op, internal rotation (IR) and external rotation (ER) exercises should only be performed with an assistant. The hip, knee and ankle must all be fixed at 90 degrees. You should then push your foot against the resistance provided by the assistant's hand. This ensures that the hip itself does not move but the muscles surrounding the hip are activated well in a manner that results in isometric contraction, without motion.

At the 6-week post op mark and with the guidance of your PT, it will be important to practice both internal rotation and external rotation as active exercises. These will include hip motion into IR and ER and is outlined in the comprehensive PT protocol handout. These motions and exercises will be demonstrated and taught by your PT.

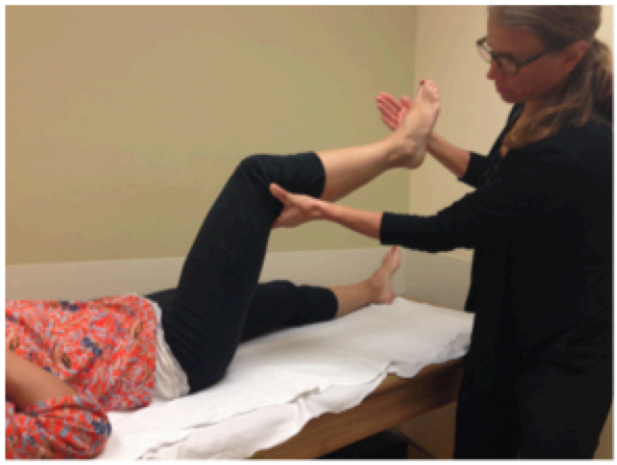
Please refer to the photographs on the next page for proper technique.



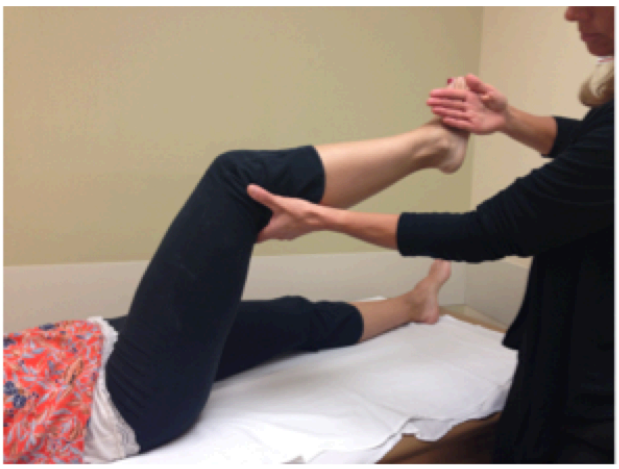
Isometric quadriceps tightening/contraction



Quadriceps relaxation



Isometric ER of the hip (external rotation)



Isometric hip IR (internal rotation)

Isometric - contraction of the muscles without moving the joint and without elongating or shortening the muscle.