

# **Hip Arthroscopy**

## I. BACKGROUND

Arthroscopy of the hip joint is a procedure that is done in relatively few centers in the Northeast. It is currently performed less commonly than, for example, arthroscopy of the knee and shoulder. The techniques and instrumentation for hip arthroscopy are still evolving. However, we can now routinely visualize the majority of the hip joint as well as diagnose and treat a variety of diseases of the hip.

Hip arthroscopy is a technically difficult procedure because: 1) the hip, contrary to popular belief, is deep <u>in the groin</u>; 2) there is no natural open space to easily insert the small instruments; 3) the joint surfaces are round (a "ball and socket"), making visualization around the corners difficult. The ball of the hip must be distracted out of the socket for about 8 to 10 millimeters to allow the arthroscope and surgical instruments to be inserted safely into the joint. This is done by distending the joint with fluid and by gently applying traction on the lower leg and foot and watching the ball move down and out of the socket. Fluoroscopy (x-ray machine) is used to image the hip joint while this is being done. Once this is accomplished, the procedure can begin.

We typically make 2 or 3 small skin incisions on the side of the hip, each about 7 to 8 millimeters in length. Hip arthroscopy is almost always an out-patient (in and out) procedure.

### **II. INDICATIONS**

The most common indication for hip arthroscopy is persistent groin pain and hip pain secondary to tearing and/or degeneration of the hip cartilage (known as the labrum). Patients with these tears often also have a sense of clicking, catching, giving way and may also limp at times. Today, most patients presenting with persistent, unrelenting hip pain or certain mechanical complaints will undergo a test known as an MRI-Arthrogram (an MRI with contrast dye placed into the joint), which can detect many, but not all, labral tears and other painful conditions of the hip.

Although some patients with labral tears have had recognized trauma to their hip, we now know that many patients who develop pain in the hip secondary to tearing of the labrum or damage to the joint cartilage have an underlying condition known as femoral-acetabular impingement (FAI). This is related to an abnormal shape of the femoral head (the ball) or acetabulum (the socket), or both. Individuals with this condition may require surgery in addition to cleaning and removing torn labrum to correct this problem, in other words, to re-shape or contour the joint to prevent recurrent tears or the development and progression of arthritis. If the acetabular labrum is detached, in some cases, it can actually be repaired back to the bone. If these special techniques are performed, healing time is certainly longer, perhaps 4 to 6 months, and patients may need to use crutches for several weeks after the surgery.

Occasionally, hip arthroscopy is done after months of persistent groin pain, usually associated with a clicking of catching sensation, even if the studies and tests are normal. In this situation, the hip arthroscopy is a diagnostic procedure, as a specific problem with the hip may not be known. In some of these cases, hip arthroscopy itself may also be normal, thereby eliminating the hip joint itself as a cause of the symptoms.

Other indications for hip arthroscopy include removal of loose bodies (floating bone chips), early arthritic conditions, persistent pain after hip dislocation, and some cases of hip infection, amongst others.

It should be understood that there are many causes of hip pain and frequently hip arthroscopy is recommended only after all <u>other</u> sources of the pain have been eliminated.

During hip arthroscopy we may:

- 1. Find nothing abnormal with the hip, or;
- 2. Find the cause of the trouble but not be able to do anything about it (for example, some cases of unsuspected arthritic diseases), or;
- 3. Ideally, find the cause and treat it effectively (for example, an acetabular labral tear or loose body).

#### III. RISKS OF THE PROCEDURE

(This is a supplement to the general arthroscopy consent that you will be given and sign prior to surgery.)

Although this is an arthroscopic procedure and by the nature of that alone, it tends to be safer and less invasive than a major open surgical procedure, there are still potential risks and complications. These, in total, occur infrequently but should be understood prior to surgery.

The surgery is most often done under a general anesthetic (with a breathing tube) with muscle relaxation. Spinal anesthesia is an alternative but has some disadvantages for out-patient surgery. Both of these present some risk that you should discuss with the anesthesia doctor just before your surgery. There are potential injuries to nerves, veins and arteries (the hip joint is surround by major blood vessels and nerves). The sciatic nerve can be stretched, which can result in chronic pain and permanent weakness in the foot and leg. Some patients report transient numbness on the top of the foot alone as a result of traction and pressure on the foot, which typically resolves in a few days. Some patients will also report a persistent area of numbness on the front of the thigh after the procedure due to damage to a small sensory nerve near one of the incisions. If a major vessel is injured, it might even need to be repaired by a vascular surgeon. Again, this is quite rare. Infection after an arthroscopic procedure is extremely uncommon because the procedure is done with constant water irrigation. Damage to the joint surfaces by instruments and the arthroscope can occur, also less common with current techniques. Blood less is negligible in the absence of any complications. Blood clots in the lower extremity have been reported infrequently after this procedure. If the femoral head has to be contoured and reshaped by removing bone, a femoral neck fracture could occur, especially if too much weight and pressure is placed on the leg too soon after surgery.

If you have any questions about these risks or want more information, please ask me or my assistant prior to surgery.

Again, this is a supplement to the arthroscopy consent form to be signed.

### IV. INSTRUCTIONS AFTER HIP ARTHROSCOPY

You will be given a pair of crutches after your surgery. The amount of weight you are permitted to apply on the leg after surgery depends on whether or not the bone has had to be contoured and reshaped, or whether or not the labrum has actually been repaired (and not just trimmed). If this is the case, we will instruct you to partial weight bear with 2 crutches for several weeks. Please follow these directions carefully, and do not put more weight on the leg than permitted, or risk injury to the hip. For patients having labral tears removed without any bone contouring, you can apply full weight on the leg immediately after surgery. In this case, use the crutches for support and safety until you feel that you can walk, full weightbearing, without the leg giving out. This may take 5 to 7 days. You will feel a dull ache or pain on the outside of the hip and in the groin, which most patients report is moderate, not severe (like a bad toothache). We will use some Novocain around the wounds for comfort immediately after surgery; this lasts 6 to 8 hours. The greatest postoperative aching and pain may last 2 to 3 days, during which time you can take the pain medication that I will prescribe for you as needed. You can take off your dressing 3 days after the procedure and simply cover the small openings with separate small Band-Aids. I use small nylon stitches on the outside of

the skin. You may shower if there is no drainage from the wounds after you change your dressing on postoperative day #3. Until then, sponges bathe. After showering, simply blot the wounds dry and cover them with Band-Aids once again. The stitches will be taken out when you return to my office for follow-up 7 to 10 days after the surgery. Please call my office on the afternoon of your surgery or the following day to set up this appointment. To reduce the risk of blood clotting, I would like you to take one enteric-coated, full strength aspirin (325 mg) every day for one month. As soon as you are comfortable, start ankle pump exercises (move your foot all the way back and all the way forward) at least 15 times per hour. Also, as soon as you are comfortable, I would recommend using a stationary bike for 15 to 20 minutes a day. The specific postoperative exercise regimen will be discussed with you and tailored to the procedure that has been performed. However, in almost all cases, an upright stationary bike is an ideal exercise tool, with low tension and the seat high. Later, once the stitches are out, water exercises may also be recommended in specific cases. Occasionally, a course of formal out-patient physiotherapy may be suggested.

Although in most cases you can gradually return to sports and your usual activities, please discuss this with me as we go along. Again, the timing on this would depend on what surgical procedure has been performed. Some activities may not be advisable based on what we found when we arthroscoped your hip.

If you have any problems after surgery, such as fevers, redness around the wounds, drainage from the wounds, or weakness and pain in the leg and foot muscles, swelling or pain in the calf or leg, or <u>any</u> other concern, call me during office hours or my answering service any time of the day or night (860-549-3210). Also, call me if you have any questions or need any additional information.

Best of luck following your hip arthroscopy procedure.

Chris Lena, M.D.