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Welcome

At Yousif Orthopedic Surgery, we understand that hip pain and dysfunction can severely impact your quality of life. Our primary objective is to deliver world-class care for your hip problem in a highly personalized manner. We attempt to manage symptoms conservatively however this guide is here for your help to prepare for your surgery if you have exhausted conservative measures and are scheduled for surgery, or thinking about hip arthroscopy.

We look forward to applying our knowledge and using every available tool at our disposal to customize a treatment to suit your individual hip needs. Thank you for allowing us to participate in your care.



YOUSIF
Orthopedic Surgery

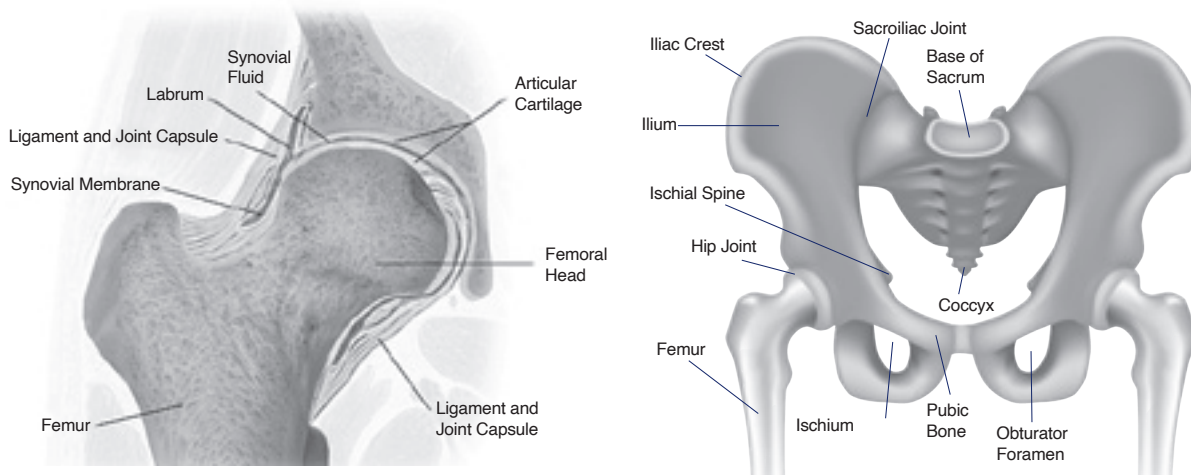
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The Hip

The hip joint is formed by a “ball” (femoral head) and “socket” (acetabulum), which join together to form a mobile joint. The bones are covered in cartilage to help absorb stress from weight bearing. Ligaments, tendons and muscles work together to keep the joint stable while the body performs different activities. Injuries to any layer of the hip can cause pain and compromise your physical function.



Problems in the Hip

Acetabular Dysplasia – The socket is too shallow and the ball does not fit tightly. This may cause the hip to be unstable, as well as increase pain and cause the joint to wear down (create arthritis) earlier than normal.

Alignment Abnormalities – Malalignment of the upper part of the femur may place abnormal and excessive stresses on the cartilage within the hip socket, causing premature damage. This may also cause the surrounding muscles to become overworked.

Athletic Pubalgia/“Sports Hernia” – A soft tissue syndrome involving irritation and imbalance of pelvic or core muscles at the musculotendinous junction (the site where the muscle and tendon meet or where the tendon attaches to the bone). Pain in the central pelvis or groin may be experienced as a result of inflammation and/or tearing of the muscle, as well as irritation of surrounding nerves.

Avascular Necrosis (AVN) – When the blood supply that feeds the bone is disrupted, it may cause the bone to die. Some causes of AVN of the femoral head include a traumatic injury (dislocation/fracture), Legg-Calve-Perthes, slipped capital femoral epiphysis and chronic steroid or alcohol use.

Cartilage Defects – The normal wear and tear of everyday life may eventually damage cartilage, the material that covers the surface of bones in healthy joints. When cartilage softens or tears, it may cause pain, reduce available motion within the joint and limit function.

Femoroacetabular Impingement (FAI) – The ball and/or socket of the hip are irregularly shaped, which may cause anatomic conflict within the joint. Repetitive friction/compression may lead to damage of soft tissue structures and/or cartilage.

Labral Tear – The labrum is a cartilage ring around the socket that seals the joint and provides stability. Separation, or tearing, of the labrum may cause pain, stiffness, catching or locking within the joint.

Legg-Calve-Perthes Disease – A childhood condition that occurs when blood supply is temporarily interrupted to the ball part (femoral head) of the hip joint. Without sufficient blood flow, the bone begins to die and deform.

Loose Bodies – Pieces of torn cartilage or bone may float around in the hip joint and cause locking or pain when they lodge between the ball and socket.

Slipped Capital Femoral Epiphysis – An adolescent hip condition that affects the growth center of the hip (the capital femoral epiphysis). The upper part of the growth plate slips backwards on the top of the femur, and if left untreated, can lead to serious hip dysfunction and pain later in life.

Snapping Hip – This syndrome is commonly caused by tendons snapping over bones in the hip. The iliotibial band that travels from the pelvis to the knee can snap at the outside of the hip, irritating the trochanteric bursa and muscles. Snapping can also occur at the front of the hip when there is inflammation surrounding the iliopsoas (hip flexor) tendon.

Soft Tissue Abnormalities – Soft tissue injuries will generally resolve without surgical intervention, but when pain does not resolve, or if the injury becomes worse, surgical inspection and repair may be necessary. Often this occurs when the injury is located in the tendon of the muscle, near where it attaches to the bone. Although rare, muscles that most commonly need to be repaired include the gluteus medius, proximal hamstring and adductor.

Synovitis – The synovium, the lining of the hip joint, can become inflamed. When this occurs, it may cause pain and reduce mobility in the joint.

Trochanteric Bursitis – Sac-like pockets composed of fluid and connective tissue are found around many joints in the body. These bursae can form into scar bands later in life. They act to reduce friction between the bone and soft tissues around the hip joint. Bursitis may occur as a result of age, repetitive activities, trauma or structural abnormalities.

Hip Treatment

Hip preservation surgery encompasses a variety of techniques. These include cartilage and soft tissue repairs or reconstructions, joint reshaping and structural reorientation procedures intended to disperse weight-bearing forces evenly throughout the joint to keep the hip healthy. Common procedures include the following:

Hip Arthroscopy – A minimally invasive surgical tool used to look inside the hip joint and facilitate access to perform surgical techniques that address symptomatic concerns. Small incisions are used to place an arthroscope (a camera) and surgical instruments inside your hip. Arthroscopy is most commonly used to guide the following techniques:*

*Arthroscopic procedures cannot fully correct large structural abnormalities. In some cases, they may be performed to improve painful cartilage, labral or synovial injuries, or as part of a staged, complex hip surgery.

FAI Decompression – A motorized burr is used to remove regions of overgrown bone that are restricting motion. Restoration of normal joint shape can provide improved mobility and function.

Labral Repair/Debridement – Symptomatic labral tears can be addressed in multiple ways during surgery. Based on the characteristics of the tear, the surgeon will decide the best procedure to use. The labrum may be debrided (damaged tissue only will be removed), repaired or replaced with graft (cadaver) tissue.

Synovectomy – Inflamed tissue that does not resolve with conservative treatment can be resected to restore motion and improve pain.

Trochanteric Bursectomy – Arthroscopic instruments are placed in the peritrochanteric space (outside of the hip) and the inflamed bursa and surrounding bands of scar tissue are removed.

Tenotomy – Painful snapping that does not resolve with conservative treatment can be addressed with a partial release, or lengthening, of the tendon. This procedure is performed for internal and external snapping hip syndrome by lengthening the iliopsoas (internal) or iliotibial tract (IT) band (external).

Cartilage Restoration – When the cartilage is not healthy, various techniques can be used to preserve or restore the “shock absorber” of the joint. These techniques may include microfracture, whereby small holes are drilled into the bone marrow to release cells that can form a scar cartilage “cap” over defects. Microfracture is generally used for small defects when the remainder of the joint is healthy. When widespread cartilage damage is present or unstable flaps of cartilage are causing pain, simple debridement or tissue “smoothing” is performed.

Muscle/Tendon Repairs – Occasionally, tears in muscles/tendons (hamstring, gluteus medius, adductor) are so severe that they do not heal with conservative treatment and require surgery. Some of these repairs can be completed using arthroscopic techniques, but for larger or more chronic tears, an open procedure may be necessary. To repair the muscular/tendinous tissue, sutures are anchored into the bone and wrapped into the muscle/tendon to secure the torn tissue back to its natural position.

Biologic Augmentation – When there is damaged tissue in your body, stem cells and healing factors are naturally sent to the area to encourage healing. New cutting-edge techniques are being performed where these cells are extracted from your own body and applied to an injured area. It is believed that biologic augmentation improves healing through the direct application of these agents to an area of injury or surgical location. Applying regenerative techniques to injured or surgical areas may help prevent progression of degenerative changes, reduce post-operative symptoms and optimize functional outcomes. Recent studies have suggested a decrease in pain, bruising and swelling immediately after surgery. Other potential benefits following application of biologic procedures may include reduced occurrences of surgical complications, such as fracture non-unions, graft failures, chronic tendonitis, incision healing and rapidly progressing osteonecrosis.

Risks Associated with Hip Surgery

Hearing about the risks of surgery can be scary. Please rest assured that we exercise every possible precaution to make sure that your surgical risks are minimized. If you have specific questions regarding the risks of your surgery, please discuss them with your medical team.

Infection

As with any surgery, there is a risk of infection. Inspect the incisions and the area around your incisions daily and notify your surgeon if you notice any of the following signs and symptoms:

- Increased redness, swelling or pain at the incision site or surrounding areas.
- Increase in drainage, yellow/green drainage.
- An odor.
- Fever greater than 101° F, or surrounding skin that is increasingly hot to touch.

Blood Clots

Restricted mobility following surgery may cause a decrease in blood flow and allow blood to coagulate in the veins of your legs, creating a blood clot. It is important to routinely perform your rehabilitation exercises to minimize the risk. Please let your surgeon know before surgery if you or a family member has a history of blood clots or clotting disorders, if you take oral contraceptives (birth control pills) or if you have a significant history of tobacco use.

Signs of blood clots:

- Swelling in the thigh, calf or ankle that does not go down (especially overnight).
- Increased pain, tenderness, redness or warmth in yourcalf, or calf pain with ankle pumps.

If you notice these symptoms, call your physician or go to the nearest emergency department immediately.

Bleeding

Although arthroscopic hip surgery is minimally invasive, bleeding during surgery is common. Many patients experience some bloody drainage from their arthroscopic portals that may break through their dressings. This should not prompt concern. Dressings may be reinforced as needed until drainage subsides. Please call your surgeon if you notice heavy bleeding that soaks through multiple dressings.

Nerve Damage

Numbness in the area around your incisions is very common. Small nerve branches that produce sensation may be stretched with surgery and temporarily cause the area to lose feeling. Injuries to the major nerves that control leg function are, fortunately, very rare.

Risks of Anesthesia

Risks of anesthesia will be discussed separately by your anesthesia provider.

How Do I Prepare for Surgery?

Pre-operative Appointments

Prior to your surgery date, you will have clinic appointments with the Hip Preservation Team. During this time, your potential surgical plan will be reviewed with you. We encourage you to ask questions to ensure that you fully understand your injury, surgery and the importance of postoperative care.

Once you feel comfortable with the information provided to you, you will be asked to sign a consent form stating that you understand the plan and want to proceed with the surgery. You will also have a pre-operative rehabilitation appointment with a member of the Hip Rehabilitation Team, who will review crutch ambulation, mobility tasks and immediate postoperative exercises for you to perform. The Hip Rehabilitation Team member will also review initial movement and weight-bearing restrictions. Please ask any questions you have about functional tasks to improve your ability to care for yourself after surgery.

Quit Tobacco Use

Research has shown that the use of any tobacco product inhibits healing and may delay or prevent your body from healing properly after surgery. It is strongly recommended that you quit the use of tobacco products at least two (2) weeks before your surgery. If you would like help or advice, please call the New York State Smokers' Quitline at 1-866-NY-QUITS (1-866-697-8487).

Discuss Current Medication

Notify the office if you begin a new medication, are taking birth control pills, or receive a vaccine. You may be directed to stop taking all NSAIDs seven (7) days before surgery.

24 Hours Before Surgery

The business day before surgery you will receive a call from the hospital or surgical center.

Do not eat or drink anything after midnight the night before surgery. This includes (but is not limited to) candy, gum, mints, water, coffee and juice. Failure to comply with these instructions may lead to a delay or cancellation of your surgery.

- If you need to take essential medications on the morning of your surgery, you may take your pills with a small sip of water.
- You may brush your teeth the morning of surgery, just do not swallow the water.

What should you bring to the Surgery Center?

Please be sure to bring your Driver's License/Photo ID and medical insurance cards. If you have crutches, please bring them with you. If you do not have them, be sure to tell the nurse when you arrive at the Surgery Center, and crutches will be provided for you. Be sure to wear loose clothing that you will be comfortable in after your surgery. Do not bring make-up, piercings, jewelry, money and/or credit cards with you.

The Day of Surgery

When you arrive at the Surgery Center, you will be taken to the pre-operative area where your surgeon(s) and anesthesiology team will meet with you to discuss the surgical plan. Nurses will start an IV and may give you medication to help you relax. You will be wheeled on your bed to the operating room, where the anesthesiologist will administer general anesthesia. You will constantly be monitored to evaluate your breathing and heart rate. When the surgery is complete, you will be moved to the post-anesthesia care unit (PACU). The nurses and anesthesiology team will make sure you are comfortable. Your family members will be brought in to visit you when you wake up. When you are awake and alert with controlled pain, you will be discharged to go home.

Caring for Yourself at Home

Once you are home, there will be some necessary precautions due to limitations from your surgery. Following are some suggestions that will help make your transition to home as simple and safe as possible.

- **Do** sit in a stable, high-seated chair with two armrests so that you can push off from the chair. If the seat is too low, place a pillow on the seat of the chair.
- **Do** use caution with household pets until you are in the house safely and seated.
- **Do** remove scatter rugs/hallway runners, and tape down edges of large area rugs.
- **Do** keep electrical cords and phone cords out of the way.
- **Do** keep your home well lit, including nightlights, a bedside light and entryway lights.
- **Do** be very careful of water on the bathroom floor. It is a good idea to have a chair for sitting in the shower the first few weeks after your surgery.
- **Do** practice getting around your house using crutches prior to your surgery. (REMEMBER TO PRACTICE GOING UP AND DOWN STAIRS!)
- **AVOID** leaning forward and bending your hip greater than 90 degrees—this includes reaching down to pick objects off of the floor or tying your shoes. (You may perform this motion to complete necessary tasks of life such as eating, using the bathroom, bathing, etc.).
- **Do not** sit in low or overstuffed chairs or sofas.

Pain Control – At the conclusion of your surgery, an intra-articular block (a combination of medications) will be injected into the surgical area to control initial postoperative pain. This will not take away all of your pain—you will continue to experience some pressure and discomfort.

You will be given narcotic pain medication to take home with you. Use this medication as instructed when needed for pain. This pain medication may have Tylenol in it. Do not take additional Tylenol without first discussing with your surgeon. Pain medication may cause constipation, so remember to drink plenty of fluids, eat a high fiber diet and, if needed, use stool-softening medications as directed.

You may be given an anti-inflammatory medication (Naprosyn, Indocin, Ibuprofen) to take for three to four weeks after surgery to prevent bony deposits. Do not take any other anti-inflammatories in addition to this medication.

If you are unable to receive the intra-articular block and/or take oral pain medication, or have some other extenuating circumstance determined by your surgeon, this adjunctive pain treatment may be used:

Other ways to help reduce your pain include motion (stationary bike, CPM machine), getting up and moving around, changing your position and icing.

Hip Dressing/Incision Care – Your dressing will be removed at your 72 hours after surgery. Either a new bandage or Band-Aids will be applied to cover your stitches. Do not apply any lotion, cream or antibiotic ointment to your incision. Your stitches will be removed approximately seven to 10-14 days following surgery.

Sleeping – For the first seven nights after surgery, you may be required to sleep with a night splint to prevent undesired positions while you sleep, this is for comfort. You will wake up in recovery with this on, and the nursing staff will show you and your family members how to apply it. After the first few nights, you may sleep in any position that is comfortable to you.

Bathing – Three days after surgery you may shower, but you may not soak or submerge your incision for two weeks after surgery. In the first few days, you may take a sponge bath in two to three inches of water without getting your incision wet.

School/Work – For a few weeks following surgery, sitting and standing for prolonged periods of time will be difficult for you. If you are currently a student, you will miss approximately two weeks of school, then gradually progress back into full days. Returning back to work greatly varies on the demands of your job. Work restrictions range anywhere from one to four months.

Movement Precautions – Remember, you should minimize bending your hip greater than 90 degrees for the first seven days after surgery. To avoid this, sit in higher chairs and avoid low or overstuffed chairs. Do not lean forward to pick something up off the ground or tie your shoe/put socks on. Also, avoid crossing your legs or feet and rotating your knee or foot excessively inward or outward. You are encouraged to lay on your stomach for a minimum of two to four hours a day. You are discouraged from sitting for prolonged periods of time (e.g., armchair, recliner).

Bracing- Occasionally, we will provide a hip abduction brace for comfort, this can be utilized on an as needed basis, but is encouraged through first 2 weeks after your surgery. If you would like you can use this at night, but most patients prefer to sleep with pillows between their legs.

Icing – Until you have no pain, soreness, warmth or swelling, you should be icing frequently (at least four times) throughout the day. Avoid chemical ice packs, as they may cause frostbite and skin irritation. Crushed ice in a well-sealed bag or bags of frozen peas work well.

Post-Operative Rehabilitation Program

You will begin formal rehabilitation at an outpatient clinic the day after surgery (it is your responsibility to set this up). The rehabilitation program will be designed for you and your specific surgery. In the first few days after surgery, you will have restrictions on the amount of weight that you can bear on the surgical leg, and the amount you are able to move your hip. All restrictions will be reviewed with you at your first rehabilitation appointment. Please share my website detroitorthodoc.com with your PT for PT protocols

- You will attend therapy for approximately five to six months, or until you have returned to all activities you would like to do with approval from your surgeon.

Maximizing recovery after hip surgery requires several things: protection of your healing tissue, a gradual return of range of motion and strength, resolution of swelling and restoration of functional abilities.

Your recovery program must be initiated **IMMEDIATELY AFTER SURGERY** unless you have been otherwise directed by your surgeon. A physical therapist/athletic trainer will review your program with you at your pre-operative appointment, and again at your first outpatient postoperative rehabilitation appointment. It is best to have thoroughly reviewed and practiced this program **PRIOR** to your surgery. It is very important that you complete your program with perseverance and consistency in order to optimize your recovery.

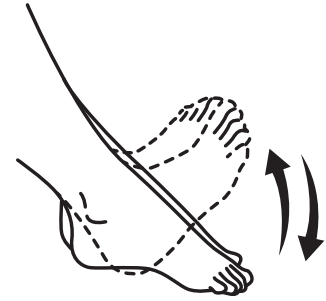
The following exercises are to be performed three to four times per day immediately following your surgery. You may feel some discomfort while performing some of the exercises, but as you perform them, your pain should lessen. If you are not sure you are performing the exercises properly, or if you are experiencing increased pain during or immediately after you do them, stop the exercises until you consult with your physical therapist or athletic trainer.

Exercises

Ankle Pumps

Moving the foot helps loosen the calf muscles, helps control swelling and improves circulation.

- Pull toes back toward hip, and then push down away from you (as in using the gas or brake pedal while driving). Use a one-count pace in each direction. Perform 30 times, hourly.



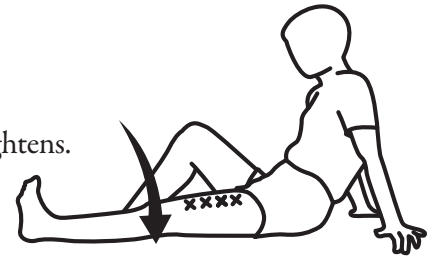
Quadricep Isometrics/Quad Sets (front of thigh)

With knee as straight as possible, contract the quad as if trying to straighten out your leg.

Hold five to 10 seconds; perform 10 times.

These cues may help you isolate the quads better:

- “Think-see-feel” kneecap being pulled up toward your hip as the quad tightens.
- Feel your quad as you squeeze to see if it is getting tight.
- Attempt to press the back of your knee into the floor.



Glute Sets

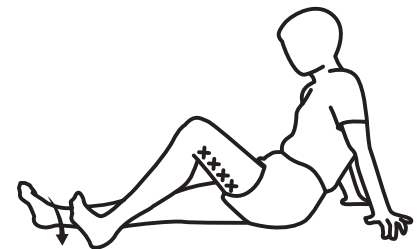
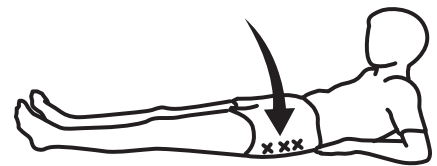
While lying down on your back with both legs straight, contract both gluteus muscles (the large buttocks muscle). Use your hands to feel the muscles tightening under them.

Hold five to 10 seconds; perform 10 times.

Hamstring Isometrics/Heel Digs

Contract your hamstring by pushing your heel downward and pulling back as if trying to bend knee. You can do this while sitting up or laying flat on your back. Hold five to 10 seconds; perform 10 times, increasing by five's as tolerated until you are able to perform 30.

Repeat exercise three to four times per day.



Aquatic Therapy

After approximately two weeks, as your range of motion and strength continue to improve, it may be beneficial to perform exercises in a pool to help improve your function. The water creates less stress on your hip(s) as you begin to practice a normal walking pattern. When it is appropriate, your physical therapist/athletic trainer will incorporate a pool program along with your land-based therapy program.

Crutch Training

Immediately after surgery, you will be allowed touchdown weight bearing, allowing about 20 lbs. of weight on your surgical leg (walk as if you were walking on eggshells). You should be keeping your knee straight while you walk. Your knee should be straight, and your foot placed flat on the floor.

Walking with crutches:

- Put the crutches forward about one step's length.
- Put the surgical leg forward, level with the crutch tips.
- Touch the front of the foot of the surgical leg to the floor. Do not bear weight onto the foot, but bear weight of the body on your crutches.

Going up stairs with crutches:

- Move to the front edge of the stairs.
- Press down on the crutches and advance the uninvolved leg to the step above.
- Stand erect and advance the surgical leg and crutches to the step.
- Repeat this process for the remainder of the steps.

Going down stairs with crutches:

- Move to the front edge of the stairs.
- Lower the crutches and your surgical leg down to the step.
- Press down on the crutches and advance the uninvolved leg.
- Repeat this process for the remainder of the steps.

If you do not feel confident and comfortable going up/down stairs with crutches, you can sit or use your arms to lift/lower yourself from one step to the next.



Follow-Up Appointments

- One day after your surgery, you will attend your first outpatient rehabilitation appointment.
- 10-14 days after your surgery, you will follow up with your surgeon. At this appointment, you will have X-rays taken of your hip and your doctor will discuss your surgery and recovery.
- Six to eight weeks after your surgery, you will follow up again with your surgeon. He or she will discuss your recovery during the first few weeks and outline a functional return to your previous level of activities.
- Four to five months after your surgery, you will return to be evaluated by your surgeon to ensure you have no concerns, and are on your way to returning to the activities you enjoy.
- Six to 12 months after your surgery, if you are physically active and participating in sports or regular exercise, you are encouraged to follow up with our Hip Rehabilitation Team monthly for continued maintenance and functional progression.

When to Call Us

Please call your surgeon's office if you experience any of the following:

- Signs of infection (fever, chills, pus/increased drainage from the incision, redness, abnormal swelling).
- Increasing numbness, weakness or tingling in your legs.
- Change in bowel or bladder control.
- Increased pain that isn't responsive to rest, ice, prescribed medications and/or physical therapy.
- Serious slips and falls.

Helpful Links/Resources

Please visit our Frequently Asked Questions page on our website:

www.HipPreservation.urmc.edu

Additional Resources

www.aaos.org

www.americanhipinstitute.org www.aahks.org

www.hipdysplasia.org

www.hipsoc.org/web/index.html

www.activerelapse.com

www.isha.net

www.nlm.nih.gov/medlineplus/hipinjuriesanddisorders.html

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