



Hip Preservation Pre-Operative Packet

Dr. Michael B. Ellman, M.D.



Dear Patient,

Thank you for choosing Dr. Michael Ellman at Panorama Orthopedics to address your medical needs. We are honored to be able to help you throughout your journey. It is important to know that you will have a great deal of support & guidance throughout this process. Your team of specialists includes Dr. Ellman, Barbara Wright (Physician Assistant), Samantha Gutierrez (medical and office assistant), the Panorama Orthopedics staff, and your Physical Therapists. As an approved candidate for hip arthroscopy, Dr. Ellman has confidence in your potential for success. Together, we will set realistic goals to get you to your desirable level of function. It is the mission of this team to work together with you to help you reach your goals.

You are the most crucial member of the team and your active participation is invaluable to the ultimate success of your surgery. Without your commitment to reach your goals and you providing feedback along the way, other team members cannot operate as effectively in their roles. We all rely on you to provide input on what you feel is working, what may not be beneficial, and how you are best motivated.

From our experience, you can expect a challenging yet rewarding road ahead. While no two patients are the same, all experience highs and lows along the way. We encourage you to build friendships with fellow patients, but caution you in comparing yourself or your progress with other patients. You have a unique medical history, injury, surgical procedure, body type, and goals, and your road to recovery will differ from others. The ultimate goal for everyone is to return to their pre-injury level and to stay there, not just how quickly you get there. This requires a progressive return that allows for complete healing of the repaired tissues and a re-balancing of all muscles involved.

We look forward to working with you and encourage you to play an active role in the process.

Sincerely,

Michael B. Ellman, MD, and our Panorama Team
Sports Medicine | Hip Arthroscopy
Website: www.panoramaortho.com
Email: mellman@panoramaortho.com
Office: [303-233-1223](tel:303-233-1223)

Contact Information.....	3
The Basics	4
Hip Labral Tear	4
CAM Impingement.....	5
Pincer Impingement.....	6
Medical and Rehabilitation Definitions	7
Causes of Hip and Groin Pain	8
Surgery Descriptions.....	9
Important Surgery Instructions	10
Preoperative Instructions	10
Preoperative Checklist	11
Hip Arthroscopy Non-Covered Service Waiver.....	14
Post-Operative Instructions	15
Prescription Medications	15
General Postoperative Instructions	16
Ice Machine	20
Physical Therapy	21
Pre-habilitation before Hip Surgery.....	22

Instructions for Using this Packet

1. Read every page thoroughly. Most of your questions will be addressed here. Be sure to read the “**Pre-Operative Instructions**” and “**Post-Operative Instructions**” within this packet for frequently asked questions.
2. Use the **Pre-Operative Instructions & Checklist** to ensure you are prepared for your upcoming surgery.
3. Write down any questions you still have after reading this booklet, and bring these up during your preoperative visit or call/email Dr. Ellman’s team.



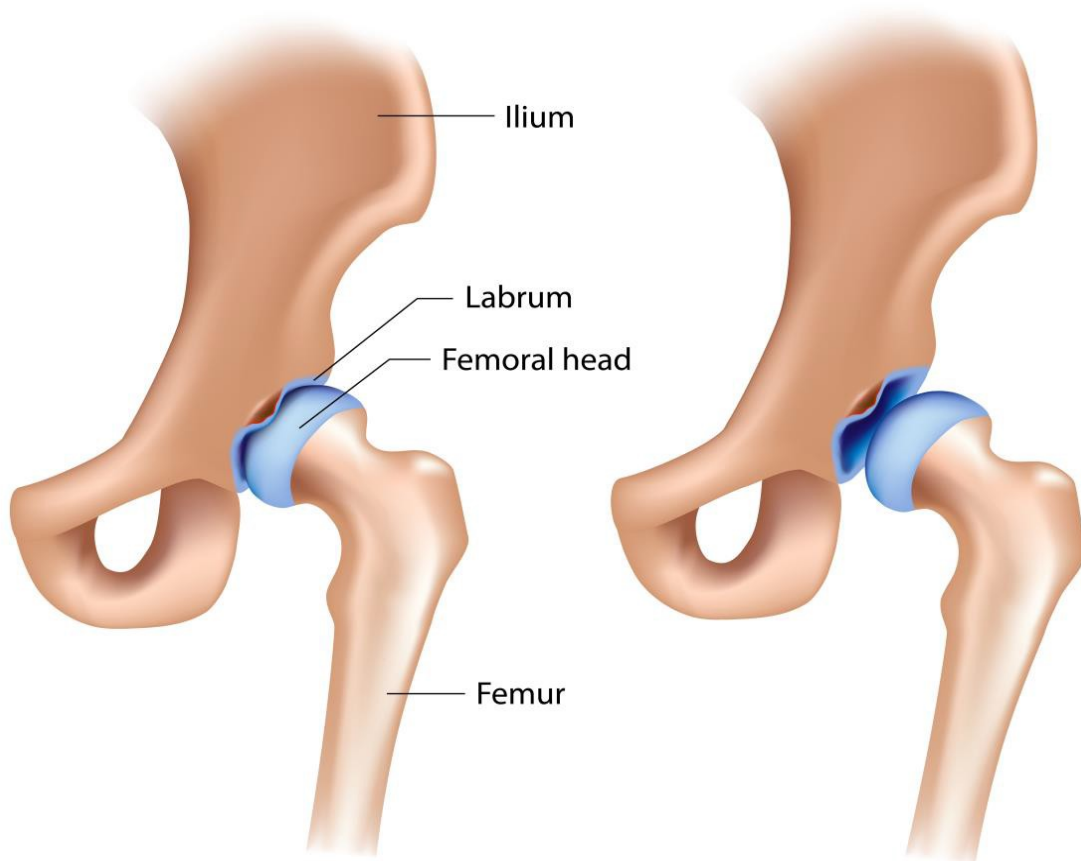
Contact Information

1. **Dr. Michael B. Ellman, MD**
 Email: mellman@panoramaortho.com
 Website: www.panoramaortho.com
 Phone: 303-233-1223; ext 6134
2. **Barbara Wright, PA**
 Physician Assistant with Dr. Ellman
 Email: bwright@panoramaortho.com
 Phone: 303-233-1223; ext 6134
3. **Samantha Gutierrez, MA**
 Clinic Assistant and Surgical Scheduler for Dr. Ellman
 Email: sgutierrez@panoramaortho.com
 Phone: 303-233-1223; ext 6134
 Fax: 303-233-8755

Department	Reasons to call	Contact Information
Triage (NavCentral) 24/7	<ul style="list-style-type: none"> Medical questions or concerns that require immediate attention 	Call: 303-233-1223 You will be connected to NavCentral or Triage
Refill Requests (7am-3pm M-F) *Excluding Holidays	<ul style="list-style-type: none"> Refills for prescriptions New prescriptions Questions about meds 	Call: 720-497-6662
Appointment Scheduling (9am-5pm M-F) *Excluding Holidays	<ul style="list-style-type: none"> Schedule follow up appointments and office visits Answers questions regarding patient appts 	Call: 303-233-1223 Request Appointment scheduling or request ext 6060
Disability Paperwork/FMLA (9am-5pm M-F) *Excluding Holidays	<ul style="list-style-type: none"> Questions and concerns regarding disability, FMLA paperwork / work notes. 	Fax: 720-497-6730 Please give us 5-7 days business days to complete FMLA paperwork
Pre-Authorizations (9am-4:30pm M-F) *Excluding Holidays	<ul style="list-style-type: none"> Insurance authorization questions, concerns regarding surgery, injections and imaging ordered by physician (MRI, CT, ultrasounds, EMG's) 	Call: 303-233-1223 Request Pre-Authorizations or request ext 7331
Panorama Physical Therapy	<ul style="list-style-type: none"> Schedule physical therapy appointments Questions or concerns for your therapist 	Golden: 720-497-6616 Westminster: 720-497-6666 Highlands Ranch: 720-497-6173
Rehabilitation Questions	<ul style="list-style-type: none"> Specific questions about rehabilitation protocol not addressed by therapist 	Samantha Gutierrez 303-233-1223; ext 6134
CPM Questions	<ul style="list-style-type: none"> Questions about CPM, problems with CPM 	Saudra Sorensen 303-932-6914 ext 3
Hip Brace Questions	<ul style="list-style-type: none"> Questions about use of hip 	DonJoy Representative 303-484-8256

The Basics

Hip Labral Tear



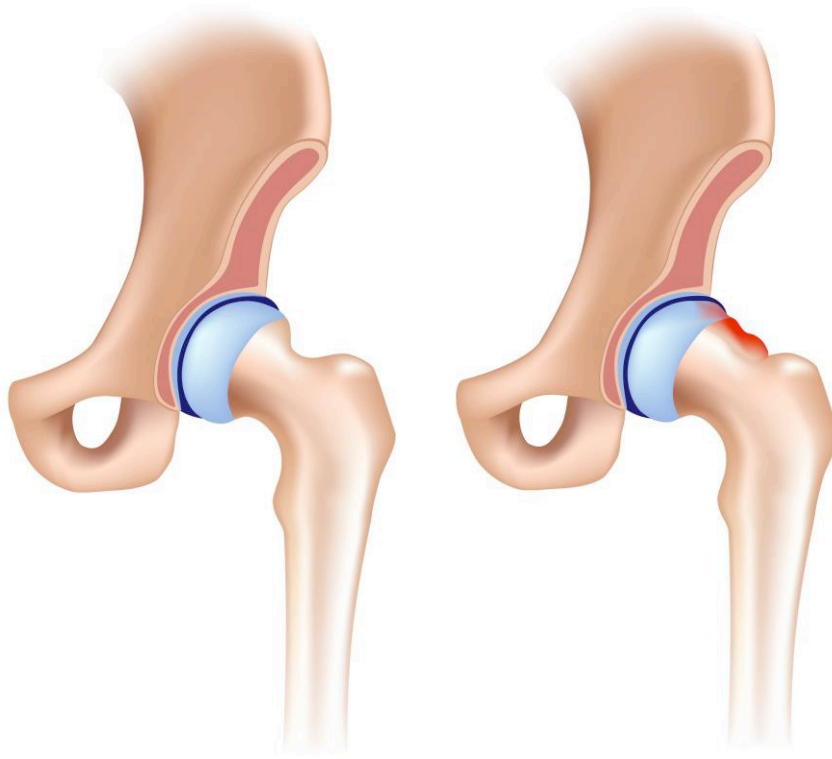
© Alila Medical Media - www.AlilaMedicalMedia.com

- The labrum, because of its function in distributing weight-bearing forces, is susceptible to injury from forces that occur with twisting, pivoting, and repetitive impact.
- Labral tears may result from femoroacetabular impingement (FAI), and may not be associated with a specific traumatic event.
- Due to its nerve innervation, an isolated labral tear can result in pain.
- Labral tears can cause micro-instability of the hip joint, leading to increased stresses between the femur (ball) and acetabulum (socket), which can lead to cartilage damage and progression of arthritis.

CAM Impingement

Normal

Cam



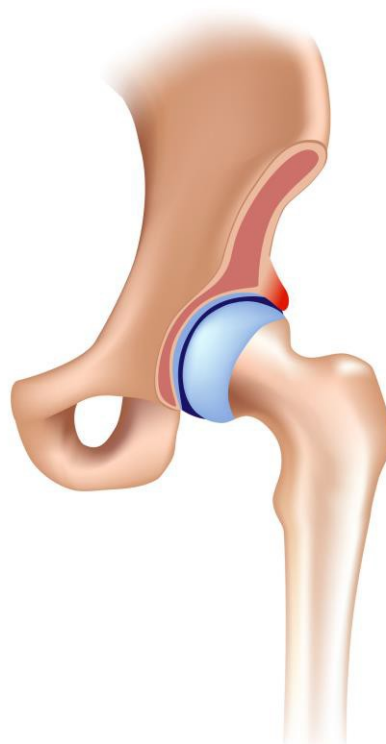
- Cam impingement occurs when the femoral head has an abnormally large radius, or an abnormal “bump” of extra bone, with a loss of the normally round shape of the femoral head.
- With a CAM lesion, the “ball” part of the “ball and socket” joint takes on more of an oval shape rather than a circle, and can cause impingement or pinching against the labrum.
- This may occur due to genetic factors or acquired factors, such as abnormal closure of the femoral head growth plate during adolescence, especially in youth athletes.
- This may lead to abnormal contact between the ball and socket, especially with certain ranges of motion, causing damage to the labrum and joint surface.
- With repetitive motion, CAM femoroacetabular impingement (FAI) may result in labral tears and articular cartilage injury.
- Cam impingement has approximately a 3-to-1 predilection for males over females.

Pincer Impingement

Normal



Pincer



- A Pincer lesion refers to an abnormal acetabulum (socket) with increased overcoverage. Pincer impingement is caused by an abnormally deep or retroverted socket that bumps against a normal “ball” (femoral head/neck). This is opposed to CAM impingement, in which an abnormal “ball” (femoral head/neck) contacts a normal socket (acetabulum).
- Pincer lesions cause persistent impingement of the femoral head against the acetabular rim, and can be a cause of labral tears and cartilage damage.
- This can occur from overgrowth of the anterior edge, or retroversion of the acetabulum, which is a condition in which the face of the acetabulum tilts slightly backward instead of its normal forward position.
- Repetitive microtrauma against the edge of the socket leads to breakdown and tearing of the acetabular labrum.
- Pincer impingement occurs just about equally in males and females and more commonly starts to cause symptoms in middle age.

Medical and Rehabilitation Definitions

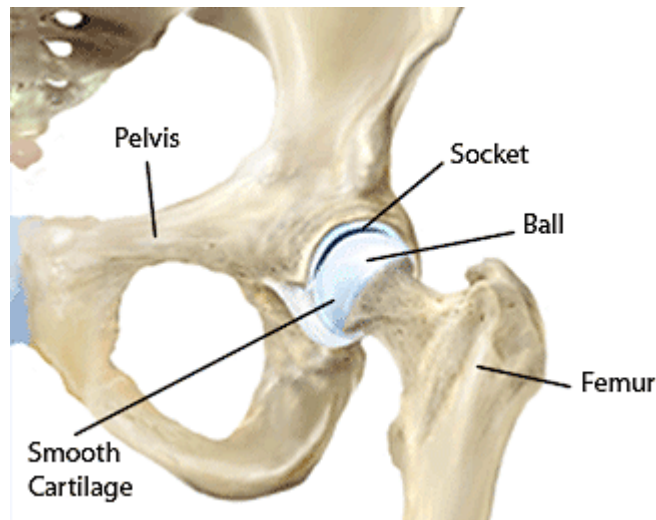


image from smithnephew.com

Acetabulum: hip socket

Anterior: towards the front of the body

AROM: “active range of motion” = movement is performed by patient

Closed Chain: movement in which the end segment of the exercised limb is fixed to the ground. Ex. standing exercises, leg press

Concentric: contraction of a muscle as it is shortening. Ex. “upward phase” of a biceps curl

Eccentric: contraction of a muscle as it is lengthening. Ex. “lowering phase” of a biceps curl

FAI: femoral acetabular impingement; 2 types = CAM and Pincer FAI

Femur: thigh bone

Gait: walking pattern

Inflammation: the body’s natural response to protect from infection and surgical trauma. Can cause swelling, heat, and pain.

Isometric: contraction of a muscle without movement

Joint Mobs: joint mobilization is a type of passive movement of a skeletal joint. It is usually aimed at a 'target' joint with the aim of decreasing joint stiffness or decreasing pain.

Labrum: a fibrocartilaginous rim extending off the acetabulum to deepen the socket and provide a suction seal effect around the femoral head

Lateral: further away from the body’s midline

Medial: towards the body’s midline

Muscle Imbalances: differences in strength or tightness in muscles on either side of the joint

Muscle Inhibition: “shutting down” of a muscle usually due to pain or inflammation

Posterior: towards the back of the body

PROM: “passive range of motion” = patient does nothing, movement performed by someone else

Prone: lying on your stomach

ROM: range of motion

RPM: revolutions per minute

Supine: lying on your back

Transverse Abdominis (TA): deepest of major abdominal muscles, stabilize the spine and pelvis

Causes of Hip and Groin Pain

	Common Symptoms	Clinical Examination
Extra-Articular pathology (i.e. Pain coming from Outside the Joint = Muscle Strains, Tendinitis, Snapping Hip)	<ul style="list-style-type: none"> - Groin, lateral hip, or posterior hip pain - Lateral or anterior snapping hip 	<ul style="list-style-type: none"> - Tenderness to palpation - Pain with stretching and/or resistance to involved structures
Intra-articular pathology (i.e. Pain coming from Inside Hip Joint = Osteoarthritis, FAI, Labral Tears)	<ul style="list-style-type: none"> - Groin pain - Clicking, giving way, locking sensation 	<ul style="list-style-type: none"> - Groin pain / limited ROM - Groin pain and/or clicking - Positive pain with flexion and internal rotation
FAI	<ul style="list-style-type: none"> - Anterior pain, often worse with sitting / activities 	<ul style="list-style-type: none"> - Anterior pain with anterior impingement test
Degenerative changes / Arthritis	<ul style="list-style-type: none"> - Medial thigh pain - Morning stiffness 	<ul style="list-style-type: none"> - Painful and/or limited motion
Capsular laxity	<ul style="list-style-type: none"> - Instability 	<ul style="list-style-type: none"> - General hypermobility - Increased external rotation with the log roll test - Increased motion and/or apprehension with femoral distraction

****The cause of hip is best determined by the LOCATION of pain.**

- Anterior Hip Pain (ie. pain in the front of hip/groin): typically due to intra-articular (FAI, osteoarthritis, labral tear) vs. extra-articular (iliopsoas tendinitis, groin strain, hernia) problem.
- Posterior Hip/Buttock Pain: most often referred from the spine or SI joints, and not from the hip joint itself.
- Lateral Hip Pain: most often due to trochanteric bursitis or abductor (gluteus medius) tears.

Surgery Descriptions

- **Labral repair:** The labrum is reattached to the acetabulum with suture anchors and stitches are tied to hold it in place and allow for healing.
- **Labral Debridement:** Removal of small frayed edges of the torn labrum by an arthroscopic shaver tool.
- **Labral Reconstruction:** This procedure is performed when the labrum is small, of poor quality, or not repairable. A piece of allograft (cadaver) or autograft is used to replace the damaged labrum. It is held in place with suture anchors along the acetabular rim.
- **Osteoplasty:** An osteoplasty is performed at the head- neck junction of the femur. During this procedure, a motorized burr is used to shave down the bony abnormality and re-create a “normal” shape of the femoral neck.
- **Rim Trimming:** A rim trimming procedure is used to address the bony abnormality of the acetabulum (socket) of the hip using a motorized burr.
- **Microfracture:** A microfracture technique is performed to address a cartilage lesion on the acetabulum or on the femoral head. A pic (awl) is used to poke holes in the bone where cartilage is missing, with the goal of allowing bone marrow cells to fill the “pothole” with a blood clot, which will then mature into new cartilage. The clot is delicate and requires minimal weight-bearing and good mobility for proper healing.
- **Chondroplasty:** Minimal cartilage damage is repaired using a motorized burr tool to shave off any frayed or loose edges.
- **Capsular Closure:** In every hip arthroscopy, the capsule must be opened at the beginning of the case to allow for instruments to pass into the joint. At the end of the case, a capsular closure is when the surgeon repairs or closes the capsule to restore normal anatomy of the hip joint.
- **Capsular Plication:** A plication is done in some cases to tighten a loose capsule. During a capsular plication, the capsular tissue is overlapped and closed with sutures to hold the tissues together, adding stability to the joint.
- **Synovectomy:** A synovectomy is performed in patients who exhibit significant inflammation of the lining of the joint. During this procedure a heat probe is used to remove the irritated tissue.
- **Greater Trochanteric Bursectomy:** In this procedure, the arthroscope is inserted into the trochanteric bursa on the outside of the hip joint and a shaver is used to shave and remove inflamed bursal tissue.
- **Iliotibial Band Release:** The Iliotibial band (ITB) is a thick band of tissue that runs from the hip to the knee along the outer side of the thigh. A release is done when the ITB is excessively tight, causing irritation (bursitis) to the outer aspect of the hip.



Important Surgery Instructions

Preoperative Instructions

Please follow these instructions carefully. If you have any questions, please contact a member of Dr. Ellman's team at (303) 233-1223, ext 6134.

SURGERY SCHEDULING

Thank you for choosing to schedule surgery with Dr. Michael B. Ellman. We are excited to be involved in your surgical experience. In preparation for your surgery, we would like to inform you of all the necessary steps to be completed prior to your procedure.

- Once you decide to proceed with surgery, your insurance company will have to approve the surgery. Once we get approval, you will receive a phone call from our surgical scheduler, Samantha Gutierrez, to discuss potential dates to have your surgery performed. Please note, Dr. Ellman's schedule books up rapidly and he is typically booked out 1-2 months for hip arthroscopy. We will do our best to accommodate your needs and time requests.
- If you do not hear from our schedulers within 1-2 weeks of scheduling your surgery, please call 303-233-1223; ext 6134.
- Once you schedule a surgical date, you will receive a call from a hospital administrator approximately 2 days prior to your surgery to inform you of the specific time of your surgery, including check-in time and hospital directions and information.
- The location of your surgery will be at **OrthoColorado Hospital** (connected to St. Anthony's Hospital) in Lakewood at:

11650 West 2nd Place
Lakewood CO 80228
Phone 720-321-5000

Preoperative Checklist

2-4 WEEKS PRIOR TO SURGERY:

- **Pre-Operative Health Clearance**
 - Pre-operative testing may be required prior to surgery. In general, if you are healthy and active, you will not require medical clearance. If you have a known medical condition, however, you may be required to undergo preoperative clearance and testing. **If requested**, this must be done within 30 days of your surgery date, and Dr. Ellman's office will need the results prior to surgery. Please ask your physician to contact Dr. Ellman's office at (303) 233-1223; ext 6134 if there are any questions. **If requested**, the following documents should be obtained and sent to Dr. Ellman's office within 30 days of surgery.
 - Letter for medical clearance from your primary care physician
 - Letter for medical clearance from specialist if necessary (e.g. cardiologist)
 - Possible preoperative lab tests requested:
 - Blood Work
 - EKG (if requested or over 40 years of age)
 - Chest X-ray (if requested or over 40 years of age)
 - Additional testing if necessary or recommended by your Medical Doctors.
 - If you are on anticoagulation or blood thinners, or are a chronic pain patient, please obtain preoperative plan from your PCP or pain physician before surgery.

Note: You MUST have ALL tests and preoperative clearance completed within 30 days of your surgery and sent to our office at least 5 days prior to your surgical date.

- Cancel any dental appointments within 2 weeks of your surgery.
- Notify Dr. Ellman if you are having any medical procedures done within one month of your surgery.
- Avoid any cortisone injection into the affected hip within 6 weeks of your surgery.
- **Discontinue birth control 1 month prior to your surgery.**
- Adjust work/social schedule accordingly during your anticipated recovery time.
- Practice the exercises listed at the end of this packet as these will help with your strength after surgery.
- If you smoke, you should attempt to stop smoking. If you cannot stop smoking permanently, if you can abstain for 24 hours before surgery, this is of benefit. It is essential to not smoke for at least 48 hours after surgery to aid in the healing process.

1 WEEK PRIOR TO SURGERY:

- Notify Dr. Ellman if there has been a change in your medical condition (cold, infection, fever, etc.) prior to surgery. It may be necessary to reschedule your surgery.
- Arrange for a family member or friend to accompany you to the hospital on the day of surgery, and for someone to stay with you for the first night you return home (typically the day of surgery).
- Please discontinue NSAID medications such as ibuprofen, and Aleve **TWO WEEKS** prior to surgery. Discontinue all over-the-counter herbal medications or dietary supplements **TWO WEEKS** prior to surgery. Discontinue all blood-thinners (Aspirin, Plavix, Coumadin, etc) **ONE WEEK** prior to surgery. You may continue taking Celebrex, Tylenol, tramadol (Ultram), and pain killers (ie. Vicodin/Norco) up until the day before surgery. We have a list of medications to discontinue prior to surgery if there are any questions.
- You should receive a call within 2-3 days of your surgery to discuss your **hip brace and CPM machine**. If you do not receive a phone call, please contact the numbers available on the contact sheet in this packet.

DAY BEFORE SURGERY/DAY OF SURGERY:

- Stay well hydrated the day before surgery. Drink plenty of fluids including water, Gatorade and juice. Avoid alcohol.
- If you have a cold, fever, or upper respiratory infection before your surgery, please call the office and inform Dr. Ellman's team.
- ***DO NOT EAT OR DRINK ANYTHING AFTER MIDNIGHT BEFORE YOUR SURGERY OR YOUR CASE WILL BE CANCELLED.***
- You may take your regular medications such as high blood pressure medicines, thyroid medicines, seizure medications, and any cardiovascular medications the morning of surgery with a small sip of water.
- What to bring to surgery: **Insurance card, Photo ID, a list of your regular medications and doses**, athletic shoes, extra shorts, pants with snaps on the side or sweat pants, crutches (if you have them), **hip brace**, and an extra bag to be used after surgery for equipment and postoperative information.
- Arrive at the hospital front desk as instructed. Plan to arrive at the hospital 2 hours before your scheduled surgical time.
- Hip arthroscopy is typically an **OUTPATIENT** surgery, so arrange for a ride home the day of surgery. In some cases, it is acceptable to stay in the hospital overnight if needed.



AFTER SURGERY

We require a CPM machine and a hip brace to use after surgery, and you will be contacted prior to surgery to set these up. Please make sure you are educated in how to use the brace and CPM machine. Also, we recommend an ice machine to help control swelling, help with pain control, and speed healing. The ice machine is not usually covered by insurance but we feel is helpful in healing following your procedure. It is your choice if you would like to purchase the ice machine. Our medical equipment team will call you to discuss the options. Please refer to DME sheet on page 19 to purchase one.

POSTOPERATIVE APPOINTMENTS

We will schedule your first postoperative visit for you when we schedule your surgery. You will be seen between 1 and 2 weeks after surgery, and then again at approximately 6 weeks and 12 weeks postoperatively. Please call the scheduling desk at 303-233-1223 to schedule your post-operative appointments or if you have any questions.

PLEASE NOTE:

Certain procedures that Dr. Ellman performs are considered unlisted because CPT has not yet assigned a procedure code for the procedure. All of his procedures are medically approved. However, CPT has not yet established a code for the procedure using arthroscopy of the hip. Some insurance companies will not recognize these codes, and appeals will need to be made. As a courtesy, we will appeal; however, if your insurance carrier denies the procedure you may be responsible for a portion of the procedure. Please see the attached **Non-Covered Service Waiver** for more information.



Hip Arthroscopy Non-Covered Service Waiver

Patient Name _____ DOB: _____
 Responsible Party (if minor) _____

Non-Covered Service Waiver

There are several unlisted arthroscopic procedures (CPT code 29999/27299) that are considered “investigational or unproven” by certain insurance companies, but deemed medically necessary per Dr. Ellman’s expertise to achieve optimal outcomes following surgery. **Therefore, it is possible that your insurance carrier may not pay for portions of your arthroscopic hip surgery related to an unlisted procedure. In this case you will be charged a flat fee of \$500.**

_____ I understand that my insurance company will be billed for all procedures performed and that they may consider these procedures not medically necessary and/or experimental /investigational/unproven and non-covered. I understand that if my insurance company does not cover the unlisted procedures I am responsible for payment of \$500.

Signature of Responsible Party

Date

Post-Operative Instructions

Prescription Medications

Indocin/Indomethacin: *NECESSARY

- This medication helps to prevent excessive bone growth after surgery, which can occur with any surgery involving the hip joint.
- Take 75 mg tablet take once per day for 10 days in the evening, with food. This medication can cause stomach upset, so be sure to take it with food.
- If you are unable to tolerate this medication, please let the office know so we can put you on an alternative medication. Do NOT take ibuprofen, motrin, advil, aleve, or naproxen while taking this medication.

Protonix (Pantoprazole): *NECESSARY

- Take this medication to help with stomach upset due to Indocin postoperatively.
- Take 1 tab (40 mg) daily for 10 days

Aspirin: *NECESSARY

- This medication is given to help prevent blood clots after surgery. This may also cause stomach upset so try to take this with food as well.
- Please take 325mg daily.
- You will take this medication for a total of 30 days after surgery.

Oxycodone (Optional):

- This medication is for pain.
- This medication is to be taken AS NEEDED.
- Plan to stay on a scheduled dose of 1-3 tablets every 4 hours for the first 2-4 days after surgery.
- After 2-4 days you should be able to space out or discontinue the medication.
- Do not drive, drink alcohol while taking this medication.

Colace (Optional):

- Take 1-2 pills throughout the day to prevent constipation, which is common after surgery and while you are taking narcotics for pain control.
- It is normal to take several days to have a bowel movement after surgery.
- Drink plenty of clear liquids as the anesthesia can cause dehydration and constipation

Flexeril (Cyclobenzaprine) (Optional):

- Take this medication to help prevent muscle spasm postoperatively.
- Take 1 tab (10 mg) every 8 hours as needed for muscle spasm; do not take more than 30 mg (3 tablets) in one day.

Zofran (Ondanestron) (Optional):

- This is an anti-nausea medication. Take this AS NEEDED



General Postoperative Instructions

Wound Care and Showering

- Leave the surgical bandage on and do not shower for 48 HOURS.
- After 48 hours, remove bandages and gauze, but LEAVE STERI STRIPS (white tape, similar to white band-aids) in place during showers. It is normal to see bloody soaked fluid on the bandages.
- Apply waterproof band-aids to each incision prior to showering. If the wounds get wet while showering, this is OK; however, we prefer to keep the wounds dry during the first 5 days after surgery.
- In between showers, leave open to air with steri strips in place.
- Do not apply lotions or ointments to the incisions.
- Your stitches are absorbable under the skin – you will not need stitches removed after surgery.
- Do not soak incisions in any pool/bath water until 3 weeks postoperatively or until your incisions are completely closed.
- Do not allow pets to sit on your lap or sleep in your bed for at least 4 weeks following surgery. Pets may harbor fleas, mites or other organisms that may cause an infection.

Physical Therapy

- Physical therapy should start ideally within the first couple days after surgery.
- If your surgery is on Friday, it is okay to wait until early the following week.
- Choose a PT clinic close to your home so that you are compliant with your program, and schedule your first appointment for the first couple days following surgery (be sure to call and schedule the surgery PRIOR to your surgery).
- For your first visit, please bring your prescription for physical therapy, provided at your preoperative clinic visit. You and your therapist can access the physical therapy protocol at on our website at www.panoramaortho.com → **Services & Treatments** → **Hip Arthroscopy** → **Therapy & Rehab Protocols (Bottom of Page)** → **FAI PT Protocol**.
- At your first physical therapy visit, your therapist should instruct you on proper weight bearing and teach your family members how to perform passive, light circumduction of the hip.

Weight Bearing

- **You will be PWB (partial weight bearing) flat foot (20 pounds) for a total of 3 weeks. Use crutches throughout this time period while walking.**
- Please walk with your foot flat and mimic normal gait.
- Once you are 3 weeks out from surgery, you may begin to progress your weight bearing slowly as directed by your therapist, unless you undergo a microfracture or labral reconstruction procedure (this will delay the time until you may begin full weight bearing, typically maintaining PWB for a total of 6 weeks following surgery).
- Getting off the crutches takes each patient a different amount of time.
- Don't try to rush yourself to get off the crutches

Brace

- You will be fitted for your brace either before your surgical day or on your surgical day. You will receive a phone call from the brace company a couple days prior to your surgery to schedule a fitting. Please try to get fitted for the brace prior to your surgery.
- You will be provided with a hip brace to be worn for the first 3 weeks following surgery, or until you are off crutches (typically 3-6 weeks). Always use crutches while wearing the brace and walk with flat foot weight bearing (20 pounds).
- **Brace Settings:**
 - 0 degrees extension – 90 degrees flexion
 - Neutral rotation
 - 10 degrees abduction
- The brace is worn only when ambulating (walking), and is worn on the outside of your clothing. You do NOT need to wear the brace while you are sleeping, on the CPM machine, laying on your stomach, using the upright bike, or icing your hip.
- The purpose of the brace is to prevent hyperflexion and abduction (bringing the leg too close to the chest or bringing the leg too far away from the body).
- The first few days, concentrate on icing the hip and wear the brace when you are up and moving around.
- You can remove the brace for showering and using the bathroom.
- The outside post on the brace should be positioned over the outside of the leg.

Ice

- If using the ice machine, the machine will automatically stay on to provide continuous low temperatures and limit inflammation postoperatively
 - Use it as much as you like or can tolerate for the first 72 hours.
 - After the first 72 hours, try to use it 4-5 times per day for the first two weeks after surgery.
 - You do not need it after 2 weeks.
 - Information about picking up an ice machine is on Page 19 of your hip packet.
 - Do not wear the brace over the ice machine pad.
- If using simple ice packs, ice the hip as much as you can for the first 72 hours – 20 minutes on, 20 minutes off.
 - Ice your hip 4-5 times per day after the first 72 hours.
 - Place the ice onto the hip over a thin layer of clothing or material, but never directly onto the skin.
 - Use as needed for the first 2 weeks.

Continuous Passive Motion (CMP) Machine

- The use of CPM has been shown to promote early healing following surgery and decrease the risk of scar tissue or adhesions post-operatively.
- Start on the day/evening of surgery if you have time and feel up to it. However, it is also acceptable to start using the CPM machine the first day after surgery.
- Use this for a total of between 4 and 6 hours per day for a total of 3 weeks.
- You can split up into increments if you get sore/tired. You will need assistance to get into the CPM for the first couple of days after surgery.
- **Settings:** Start with the settings at 20 degrees extension and 55 degrees of flexion
 - Increase by 7-8 degrees per day as tolerated. **DO NOT GO PAST 0-90 DEGREES.**
 - Example: Day 1, 20 of ext and 55 of flexion. Day 2: 12 degrees of extension and 63 degrees of flexion, etc.
- Use for a total of 3 weeks.
- To help in the prevention of lower back pain, try and maintain proper spine alignment while in the CPM; you may roll a towel or use a small pillow behind your lower back.
- If the CPM machine is uncomfortable for you, you can substitute time on the CPM with use of a stationary bike (see below).

Biking

- Gentle, no resistance, upright, stationary biking can begin the day after surgery.
- Do NOT use a recumbent bike! NO Nustep!
- Use non-operative leg to push the operative leg around gently.
- 20 mins on upright bike = 1 hour on motion (CPM) machine.
- You do not have to go out and buy a bike; rather, just use the bike while at PT.

Ted Hose

- You will be given a pair of ted hose (stockings) to wear after surgery. These help in the prevention of blood clots postoperatively.
- Please wear these at all times for the first 2 weeks following your surgery. If they come above your knee to the thigh, you may cut them off so they end below the knee after the first week postoperatively.

General Activity Levels

- It is beneficial to change positions often after hip arthroscopy. Alternate sitting, reclining, and lying down approximately every 30 minutes. Feel free to move around at home as much as you can tolerate, as we do not want the hip to get stiff.
- Spend 1-2 hours per day on your stomach (you can take the brace off for this).
- You will be permitted to drive (automatic transmission) **4 days** after surgery as long as you are not taking any narcotics and you feel comfortable doing so.

Follow-Up

- A follow up visit will be scheduled with Barbara Wright, PA, 10-14 days following your surgery.
- Please call centralized scheduling at 303-233-1223 if you don't have an appointment.
- Routine post-operative follow up appointments will be made 2 weeks, 6 weeks, and 3 months following surgery.

When should you Contact the Office

- You have a fever > 101.4 (a low grade temp is expected after surgery, but let us know if it gets this high!)
- You develop chills or sweats
- You have pus or increasing redness and warmth surrounding the incision sites
- You develop calf swelling or calf pain after surgery
- You experience any chest pain or difficulty of breathing

Possible Postoperative Complications and Risks

- **Infection:** The risk of infection is decreased with a sterile operating environment and antibiotics. Starting three days before your surgery, be sure to keep the skin of your hip as clean as possible using soap and water. Following surgery, careful handling of the incision sites reduces the risk of infection.
- **DVT:** Developing a DVT (deep vein thrombosis, aka blood clot) is decreased through instituting early motion (CPM), mechanical means (TED hose) and medications (Aspirin). Following the pre-operative and post-operative instructions will reduce the risk of blood clot formation.
- **Pain:** With any surgical procedure, there is a potential complication of pain. Medication, ice, rest, compression, elevation and therapy reduce post-operative pain.
- **Numbness:** With hip arthroscopy, there is a small chance of numbness in the genitalia region briefly postoperatively. Also, you may experience some numbness of the upper outer portion of the thigh on the operative leg after surgery. This is due to stretching of the lateral femoral cutaneous nerve, a sensory nerve that is close to the surgical area. This nerve may be stretched or bruised during the procedure. This is typical and the numbness should resolve over time.
- **Heterotopic Ossification:** Any time we operate around the hip joint, there is a small chance of heterotopic ossification, which is abnormal bone growth in the surrounding muscles. We give you Indomethacin for the first 10 days after surgery to help prevent this complication. Please make sure to take the Indomethacin after surgery.
- **Sexual Dysfunction:** Because we have to put the hip in traction during surgery to allow for instruments to go into the joint, there is a very small risk of nerve injury to the nerves that control sexual function. If this occurs, it is typically temporary and should resolve within 3 months following surgery.

Cold Therapy Unit



The DonJoy IceMan CLEAR3 provides a clear advantage with controlled delivery of cold therapy helping patients and medical practitioners to easily manage post-operative pain and swelling. It helps reduce pain and swelling, speeding up rehabilitation. It provides extended cold therapy for a variety of indications and protocols as directed by medical professionals. The semi-closed loop circulations system maintains consistent and accurate temperatures.

Cost – \$175 + tax (not an insurance covered item)

Panorama Orthopedics & Spine Center offers the ability to purchase this unit directly from the Medical Supply Shop located inside the Panorama Golden location at 660 Golden Rd. Suite 140, Golden CO.

No appointment is needed if picking up in Golden office. Visit us Monday – Friday between the hours of 7am & 5pm.

Detailed information and instructions will be given at time of pickup.

You will take the unopened product with you on your scheduled surgery day to your individual surgical site (Golden Ridge Surgery Center, Ortho Colorado Hospital, or St. Anthony Hospital).



Physical Therapy

Dear Therapist,

Thank you for continuing rehabilitation with Dr. Ellman's patient following their hip arthroscopic surgery. The intent of this program is to provide *guidelines* for progression of rehabilitation. It provides the basic exercises and techniques you will need to guide the patient to return to normal function. At the 6-8 week follow-up and if appropriate for the patient, Dr. Ellman will determine whether the patient is ready to progress to an advanced functional training program for return to sport, a maintenance strength program, or to continue to work on "the basics" before progressing further.

- To access our most up-to-date physical therapy protocol, please visit our website at www.panoramaortho.com → Services & Treatments → Hip Arthroscopy → Therapy & Rehabilitation Protocols for Physical Therapists (bottom of page). This will guide you through the entire rehabilitation process.
- Utilize the rehab outline and exercise descriptions as a guide. This is a proven program in terms of exercises and treatment, but some patients may need to move slower.
- Utilize clinical decision making to adjust treatments if needed within given guidelines and precautions.
- Progression through each phase of rehabilitation is based on clinical criteria and time frames.
- Understand that the program should be tailored for the individual based on their ability to progress and respond to treatment. This concept should continually be emphasized to the patient. Advancing through the rehabilitation process involves an accurate assessment of joint function, strength, mobility and progressive overload based on the patient's response.
- Primary goals at approx. **6 weeks out (non-microfracture)** and **10 weeks out (microfracture)** are a normalized gait and good glute recruitment. We expect ROM restrictions at this time, especially External Rotation, Internal Rotation and Extension. Do not push through pain to achieve more as these ranges will increase with a return to functional activity not with overly aggressive stretching.

If you have any questions during the rehabilitation process, please feel free to contact Dr. Ellman or his assistant Samantha Gutierrez at 303-233-1223, ext 6134.

Sincerely,

Michael B. Ellman, MD
Email: mellman@panoramaortho.com
Hip Arthroscopy & Sports Medicine

Home Exercises before Hip Surgery

Goals: Increase lower body strength with good core control.

Please see how you feel with these exercises. If something causes discomfort or pain – don't push through the pain to do it.

PreHab exercises: Page one – Do these 3x10 on each leg daily. All other exercises, start with 1x10, with good form, 2-3 times per week. If pain, or unable to complete without good form, skip that exercise.

You can do any exercise you like that causes no pain during or lasting pain the days after the activity.

Do not over-stretch, you can do light stretching – gently holding 3x30 seconds.

A. Standing Hip Abduction in Internal Rotation:

3 sets / 10 repetitions / Once a day

Standing on one foot, point opposite toe inward slightly. Maintaining a level pelvis, lift your straight leg out to the side and hold for 2-3 seconds before slowly returning to start position. Do not lean away from the moving leg. Repeat on both sides.



B. Bridges

Choose one exercises per day

1 set/ 20-30 repetitions / 3 x per week

For each exercise, continue each repetition when able to hold stable AND no pain is felt.

Double leg bridge: Lying on your back place rubber tubing around knees with hip and knees bent. Raise buttocks while keeping core stable then slowly lower.

Single leg bridge: Progress to single leg bridging.

Bridge with shoulders on Ball: Progress to laying with shoulders on ball and feet on floor then lowering and raising your buttocks.

Bridge with single leg: Progress to lifting one leg by extending the knee then perform with the other leg. Do not go up and down with the hips.



C. Sidelying Glut Medius Clams:

1 set/ 20-30 repetitions / 3 x week

Please avoid sidelying straight leg raises as the joint reaction force is greater in this position (clams, as pictured, are okay to perform)

Neutral Hip Clams:

Laying on your side, hips **straight** and knees bent to 90 degrees. Engage TA & squeeze glute to raise top knee without shifting pelvis, heels remain together throughout. Do not allow spine to collapse to table.



Hip Extensions: Keeping chest flat on table, engage TA, then squeeze glute and lift heel toward the ceiling, Keep hips touching table. Repeat twenty times.



Romanian Dead Lift: Keeping knee straight, reach down toward the floor as you lift one leg toward the ceiling. With a flat back, reach down until feeling a light stretch in the hamstring, stand up tall to return to start position.



Double Leg Squats: Start standing with feet shoulder width apart, bend at the knees – sitting back as if into a chair, to 60°. Do not allow knees to go past toes.

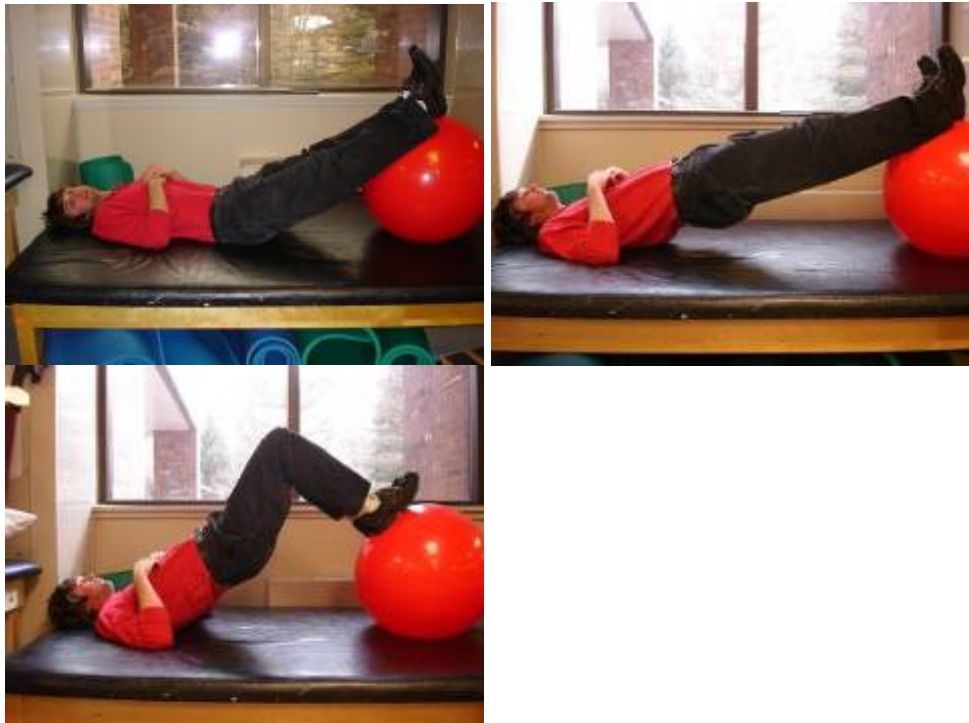
3 x 30



Bridge with Ball (heels on ball) Keep TA drawn in, slowly lift up hips and keep them even & controlled throughout motion. **Repeat for ten repetitions**



Bridge with Ball to Hamstring Curl – Dig heels into the ball and pull heels toward buttocks, keeping hips high and controlled. **Repeat for ten repetitions**



Toe Bridges. Keep TA drawn in, slowly lift up hips and keep them even & controlled throughout motion. **Repeat for ten repetitions**



Be well,

Stay active – and keep moving!