### **Preoperative Information Packet**

# Panorama Hip Preservation Center

Combined Hip Arthroscopy and Periacetabular Osteotomy



Michael Ellman, MD

**Ronald Hugate, MD** 



# We're on team YOU.

### Dear Patient,

Thank you for choosing The Hip Preservation Team 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 and guidance throughout this process. Your team of specialists includes Dr. Ellman and Dr. Hugate, Molly Bryan, Justin Burtz, and Barbara Wright (physician assistants), Samantha Gutierrez and Jenna Manzanilla (medical and office assistants), the Panorama Orthopedics staff, and your physical therapists. Because you are an approved candidate for hip arthroscopy and Ganz osteotomy, Drs. Ellman and Hugate have confidence in your potential for success. Together, we will set realistic goals to get you to your desired 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 reaching your goals and 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 not to compare 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. Rather than focusing just on how quickly you get to your pre-injury level, the ultimate goal is to return to that level and stay there. This requires a progressive return that allows for complete healing of the bone and repaired tissues and a rebalancing of all muscles involved.

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

Sincerely,

**Panorama Hip Preservation Center** 

For Appointments: 303-233-1223
Panoramaortho.com

# **Contact Information**

### **Contact Information for The Hip Preservation Team**

### **Clinical Liaison/Surgery Schedulers:**

Samantha Gutierrez (Dr. Ellman)

Jenna Manzanilla (Dr. Hugate)

Phone: 303-233-1223, Ext. 6605 (Sam) and Ext. 6635 (Jenna)

Fax: 720-497-6730 (Sam) and 720-497-6711 (Jenna)

Email: drellmanpc@panoramaortho.com and drhugatepc@panoramaortho.com

Department	Reasons to Call	Contact Information	
Care Navigation (Triage Department) (7am-5pm M-F) *excluding holidays	Medical questions or concerns that require immediate attention	Call: 303-233-1223 Ext: 1100	
Prescription Line (8am-3pm M-F) *excluding holidays	Refills for prescriptions Change in prescriptions	Call: 720-497-6662 (Requests after 3pm are handled the next business day)	
Appointment Scheduling (7am-5pm M-F) *excluding holidays	Scheduling of follow-up appointments and office visits Questions regarding patient appointments	Call: 303-233-1223 Option 2, then option 1	
Disability/FMLA Paperwork	Questions and concerns regarding disability, FMLA, return-to-work paperwork	Fax or email forms to both Sam and Jenna, or drop off paperwork in person at any office. **Please allow 5 to 7 business days for completion.**	
Pre-Authorizations (9am-4:30pm M-F) *excluding holidays  Insurance authorization questions and concerns regarding surgery, injections, a imaging ordered by physiciar (MRI, CT, ultrasounds, EMGs)		Call: 303-233-1223 Ext: 1011	
Panorama Physical Therapy	Scheduling of physical therapy appointments Questions or concerns for your therapist	Centralized Scheduling Office 303-274-7330	
Billing and Customer Service Office	Questions about insurance or billing	720-497-6637	
Littleton Hospital	General questions Check-in and surgery times	303-730-8900 (main hospital line)	
CPM Questions	Questions about CPM, problems with CPM	1-800-845-6364	
Hip Brace Questions	Questions about use of hip brace/ settings	DonJoy representative 303-469-3795	
Preadmission Testing	Scheduling of COVID-19 test Pre-op clearance	303-738-2750	

# **Surgery Instructions**

### **Important Surgery Instructions**

### **Preoperative Instructions**

### **Surgery Scheduling**

Thank you for choosing to schedule surgery with Drs. Ellman and Hugate. 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, you will need to contact both Samantha Gutierrez and Jenna Manzanilla to set up a surgical date. We will then submit the surgery order to your insurance for approval. Please note: our surgeons' schedules book up rapidly, and we typically book out 2-3 months. We will do our best to accommodate your needs and time requests.
- If you do not hear from our schedulers within 1-2 weeks after scheduling your surgery, please contact both Samantha and Jenna. Call 303-233-1223, ext. 6605, and 303-233-1223, ext. 6635, or email drellmanpc@panoramaortho.com and drhugatepc@panoramaortho.com.
- After 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. You will also receive hospital directions and other key information.
- We operate at Littleton Adventist Hospital. Please make note of the address:

**Littleton Adventist Hospital** 

7700 S. Broadway Littleton, CO 80122

### **Preoperative Checklist**

- Obtain preoperative health clearance.
- All patients must be medically cleared for surgery within 30 days of their scheduled procedure. Please contact preadmission testing to schedule your pre-op appointment. You can reach that office at 303-738-2750.
- Note: If you do not live in the Denver metro area, you will need to get clearance by your primary care physician. This clearance must be completed <u>within 30 days</u> of your scheduled procedure.
- Cancel any dental appointments within 6 weeks of your surgery.
- Notify our team if you are having any medical procedures done within 6 weeks of your surgery.
- Avoid any cortisone injections into the affected hip within 6 weeks of your surgery.
- Discontinue birth control 1 month prior to your surgery.
- Adjust your work and 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 will benefit you. It is
  essential that you not smoke for at least 48 hours after surgery to aid in the healing
  process.
- Please take the time to complete all surveys that will be emailed to you. We
  appreciate any and all feedback to better our practice as well as the field of hip
  preservation. Please see important PatientIQ information at the end of this packet.
- Please take time to go to our website and view important videos on using crutches, wearing the hip brace, and using the CPM machine. You will also find valuable information about both procedures being performed (hip arthroscopy and Ganz osteotomy). You can go to www.panoramaortho.com > Services & Treatments > Hip Preservation & Hip Arthroscopy.

# **Surgery Instructions**

### 1-2 weeks prior to surgery

- Notify our team 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.
- Please discontinue NSAID medications such as ibuprofen and Aleve 2 weeks prior to surgery. Discontinue all over-the-counter herbal medications or dietary supplements 2 weeks prior to surgery. Discontinue all blood thinners (aspirin, Plavix, Coumadin, etc.) 1 week prior to surgery. You may continue taking Celebrex, Tylenol, tramadol (Ultram), and painkillers (Vicodin/Norco) up until the day before surgery. If you have any questions, please ask us for a list of medications to discontinue prior to surgery.
- You should receive a call **within 2-3 days** of your surgery to get set up with your **hip brace and CPM machine.** If you do not receive a phone call, please call the phone 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 our team.
- Stop eating solid food 8 hours prior to your surgical time, and stop drinking any fluids 4 hours prior. You will get confirmation of these times from the hospital.
   Please make a note of these times. If you eat or drink anything outside of these timelines, your surgery will be canceled.
- You may take your regular medications such as high blood pressure medications, thyroid medications, seizure medications, and any cardiovascular medications the morning of surgery with a small sip of water.
- Bring the following to your surgery: insurance card, photo ID, a list of your regular medications and doses, comfortable clothing (such as sweatpants), crutches, hip brace, CPM machine, 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.
- This procedure is an **inpatient surgery**; please anticipate being discharged from the hospital **2-3 days after surgery**.

### **After surgery**

We require a hip brace and a CPM machine to be used after surgery, and you will be contacted prior to surgery to set these up. Please make sure you are educated on how to use the brace and CPM machine. We also recommend an ice machine to help control swelling, help with pain control, and speed healing. The ice machine is *not covered by insurance*, but we feel it is helpful in healing following your procedure. It is your choice if you would like to purchase the ice machine. We will be happy to set you up with an ice machine at any of our office locations.

### Postoperative appointments

We will schedule your first postoperative visit when we schedule your surgery. You will be seen between 1-2 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 postoperative appointments or if you have any questions.

### Please note:

There are several unlisted hip procedures (CPT code 29999/27299) that are deemed medically necessary per Dr. Ellman's expertise to achieve optimal outcomes following surgery. Unfortunately, these services are still considered "investigational or unproven" by insurance companies and are not reimbursed. Please read Dr. Ellman's non-covered service waiver form for further details. You may contact our billing department for any questions regarding this fee.

# **Surgery Descriptions**

### **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 reconstruction or augmentation: 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. An augmentation is performed when there is still a small amount of viable native labrum but not enough to perform an adequate repair.
- **Femoroplasty:** 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 recreate a "normal" shape of the femoral neck.
- Acetabuloplasty: A rim-trimming procedure is used to address the bony abnormality of the acetabulum (socket) of the hip using a motorized burr.
- **Subspine decompression:** The subspinous region is the area directly above the rim of the socket. If this region is protruding or larger than normal, it can cause another area of impingement and pain. A burr is used to shave down this area to a normal contour to alleviate pain and impingement.
- 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.
- **Periacetabular osteotomy:** This is the surgical cutting of bone. Dr. Hugate will make several cuts into the pelvic bone to realign the acetabulum.

# **Postoperative Instructions**

### **Postoperative Instructions**

### Medications

- Multivitamin that includes iron: I tablet by mouth twice daily (morning and evening)
- Pain medications: These medications will be prescribed and refilled on an asneeded basis. Do not drink alcohol, drive, or operate heavy machinery while using pain medications. Pain medications can cause constipation. You should take the over-the-counter stool softener of your choice while on the pain medication. Please call our office Monday through Friday, 8am-3pm, as needed for pain medication refills. Please allow 24 hours for medication refills. We will not refill pain medications requested after 3pm or on weekends! We only provide short-term postoperative pain management (maximum of 2 months).
- DO NOT TAKE anti-inflammatories: These medications can slow bone healing and are therefore not recommended for use in some patients. Common types of anti-inflammatories include Advil, Aleve, Orudis, Motrin, ibuprofen, Naproxen, and Naprosyn. Note that Tylenol (acetaminophen) is not an anti-inflammatory and therefore is an acceptable alternative.
- Resume your usual home medications unless otherwise directed.

### **Wound Care and Showering**

- Leave the surgical bandage on, and do not shower for 48 hours.
- You may take a brief shower after 48 hours. Your dressing is waterproof.
- You may remove your dressings 7 days after your surgery. If there is no drainage, you may leave the wounds open to air. If you are having any skin irritation from the dressing, please contact our office.
- If the wounds get wet while showering, this is okay; however, we prefer to keep the wounds dry during the first 7 days after surgery.
- If you have Steri-Strips (white tape, similar to white Band-Aids), do not remove them. These will peel off on their own over time.
- A small amount of drainage is normal. If this occurs, place another clean/dry gauze dressing on the wounds and change daily until the drainage stops. If you have ACE wrap or TED hose, you may remove to shower and then put back on afterward for compression.
- In between showers, leave the wounds open to air with Steri-Strips in place.

# **Postoperative Instructions**

- Do not apply lotions or ointments to the incisions.
- Your stitches are absorbable under the skin. You will not need to have the stitches removed after surgery.
- Do not soak incisions in any pool or 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 begin when you get home from the hospital.
- Choose a physical therapy clinic close to your home so that you are compliant with your program, and schedule your first appointment about a week after your surgery (be sure to call and schedule physical therapy prior to your surgery).
- For your first visit, please bring your prescription for physical therapy, which will be provided at your preoperative clinic visit. You and your therapist can access the physical therapy protocol on our website at www.panoramaortho.com > Services & Treatments > Hip Preservation & Hip Arthroscopy. Scroll down to the bottom of the page, and click on Therapy & Rehab Protocols for Physical Therapists. Then click on Ganz protocol 2019.
- 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 6 weeks. Use crutches throughout this time period while walking.
- Please walk with your foot flat and mimic normal gait.
- Once you are 6 weeks out from surgery, you may begin to progress your weightbearing slowly as directed by your therapist.
- Don't try to rush yourself to get off the crutches. Getting off the crutches takes each patient a different amount of time.

### **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 of days prior to your surgery to schedule a fitting. Please try to get fitted for the brace prior to your surgery.
- The hip brace should be worn for the first 6 weeks following surgery or until you are off crutches (typically 6-8 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, lying 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).
- During 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.

# Postoperative Instructions

### **Ice**

- If you are 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 2 weeks after surgery.
- Use it as you wish after 2 weeks.
- Information about picking up an ice machine is included in this hip packet.
- Do not wear the brace over the ice machine pad.
- If you are 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 place it directly onto the skin.
- Use as you wish after 2 weeks.

### **Continuous Passive Motion (CPM) Machine**

- The use of CPM has been shown to promote early healing following surgery and decrease the risk of scar tissue or adhesions postoperatively.
- 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 the CPM machine for a total of 4-6 hours per day for a total of 6 weeks.
- You can split up into increments if you get sore/tired. You will need assistance to get into the CPM for the first few 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 degrees of extension and 55 degrees of flexion. Day 2: 12 degrees of extension and 63 degrees of flexion.
- Use for a total of 6 weeks.
- To help in the prevention of lower back pain, try to 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 as soon as the day after your surgery although we recommend you do this with your physical therapist for the first time.
- Do not use a recumbent bike! No NuStep!
- Use your nonoperative leg to push the operative leg around gently.
- 20 minutes 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 physical therapy.

### **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.

### **General Activity Levels**

- It is beneficial to change positions often after hip surgery. Alternate between sitting, reclining, and lying down approximately every 30 minutes. Feel free to move around at home as much as you can tolerate as you 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 may drive again when fully weight-bearing without any assistive devices and when you are off all narcotic medications. Do not drive while on pain medications. When you resume driving, it is recommended that you start in an empty parking lot and test your physical ability to react quickly. If you are able to comfortably maintain control of your vehicle and rapidly apply the brakes if needed, then it is safe to drive. Driving typically starts 6 weeks after a right hip surgery and 2 weeks after a left hip surgery.

# Postoperative Instructions

### Follow-Up

- A follow-up visit will be scheduled with a member of Dr. Ellman *and* Dr. Hugate's team 10-14 days after your surgery.
- Please call centralized scheduling at 303-233-1223 if you don't have an appointment.
- Routine postoperative follow-up appointments will be made 2 weeks, 6 weeks, and 3 months following surgery.
- We prefer to schedule these appointments on Thursdays in our Highlands Ranch office since Drs. Ellman and Hugate are both there.

### When You Should Contact the Office

- You have a fever greater than 101.4° (a low-grade temperature 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 breathing.

### **Possible Postoperative Complications and Risks**

- Infection: The risk of infection is decreased with a sterile operating environment and antibiotics. Starting 3 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 preoperative and postoperative 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 physical therapy reduce postoperative pain. You will experience pain post-op, and we will help to safely manage it, while minimizing the use of dangerous and addicting opioids.
- **Numbness**: 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 usually a temporary complication; however, there is still a low percentage of patients who have permanent or long-term damage to this nerve.
- **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.
- Malunion/nonunion: During the osteotomy, parts of your pelvis are cut and reoriented. There is a risk of failure of bone-to-bone healing (nonunion) or bone shifting during the healing process (malunion). While rare, if this were to occur, further surgery might be required to correct the problem.

\*\*Dr. Ellman was one of the first surgeons in the United States to begin utilizing post-free distraction during hip arthroscopy. The advantage of this technique is that it eliminates the risk of pudendal nerve injury in the groin and damage to surrounding soft tissues.\*\*

# Postoperative Instructions

### **Blood Thinner Education Sheet**

Blood clots can either develop in your legs (*DVT* or deep vein clot), or on rare occasions, a clot may travel into your lungs (*PE* or pulmonary emboli). Both DVT and PE can be dangerous or even life-threatening. Prolonged bed rest, obesity, smoking, estrogen, birth control pills, genetic conditions, surgery, certain types of cancer, and sitting still for long periods of time are all risk factors for blood clot formation. To prevent blood clots after surgery, your doctor will prescribe a blood thinner. The type of medication prescribed and the length of time you will need to take that medication depend on many factors. Please make note of which blood thinner your doctor has prescribed for you and read the information pertaining to that medication thoroughly.

### What are the signs and symptoms of blood clots?

Increased swelling in the leg
Increased pain or tenderness in the leg (especially the calf area)
Redness or discolored skin on the leg
Unexplained shortness of breath
Pain with deep breathing
Coughing up of blood

### How are blood clots prevented?

The sooner you can get up and move around after surgery, the better. Walking helps prevent blood clots by increasing your circulation. If you are unable to walk, then moving your leg around while in bed or performing ankle pumps frequently (10-15 times per hour while awake) can help as well. We recommend that you wear the compression stockings (TED hose) that you received in the hospital for 2 weeks on both legs as blood clots can occur on the nonoperative leg as well. The TED compression hose help to keep the swelling down and the blood flowing to prevent clots.

### What medications are used to prevent blood clots?

Medications that thin the blood are used to prevent blood clots. The most common blood thinners we use are aspirin, Xarelto, Eliquis, and Lovenox. Of course, because they are blood thinners, these medications may cause you to bleed more easily. Call our office (303-233-1223) if you are taking these medications and notice excessive bleeding from the wound, bleeding from the gums, significant bruising, or black or bloody stools. These could all be signs that your blood is too thin.

### What are specific precautions while taking any blood thinners?

If possible, use an electric shaver instead of a razor blade, use a soft toothbrush, do not engage in contact sports or activities, and use a stool softener to avoid extreme constipation.

# The Basics

### **Cold Therapy Unit**

The DonJoy® IceMan Classic3™ delivers continuous cold therapy to help patients and medical practitioners easily manage postoperative pain and swelling, thus speeding patient recovery and rehabilitation. It provides extended cold therapy for a variety of indications and protocols as directed by medical professionals.

\*Please consult our icing instructions for frequency and length of use.\*

Cost: \$185 + tax (not covered by insurance)

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 250 Golden, CO 80401

No appointment or reservation is needed if picking up in Golden office. Visit us Monday through Friday from 8am-5pm. These units are also available for purchase at the front desk of both of our Westminster offices as well as our Highlands Ranch, Castle Rock, and Summit offices during clinic hours. If staff members are working with other patients at the time of your arrival, please anticipate the possibility of a short wait for assistance in purchasing a cold therapy unit at *any* of our offices. Detailed information and instructions will be given at time of pickup.



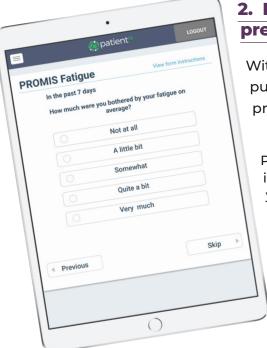
# An Important Message from Drs. Ellman and Hugate:

# Your Participation Makes a Difference! Please sign up and respond to Patient IQ. Why?

### 1. Optimization of our clinical outcomes

We take great pride in tracking and studying patient outcomes. Our goal is to provide you with the best experience possible throughout your journey, but we need *your* help! By filling out PatientIQ surveys before and after your hip surgery, *you* will help us to become better surgeons.





## 2. Research to improve the future of hip preservation

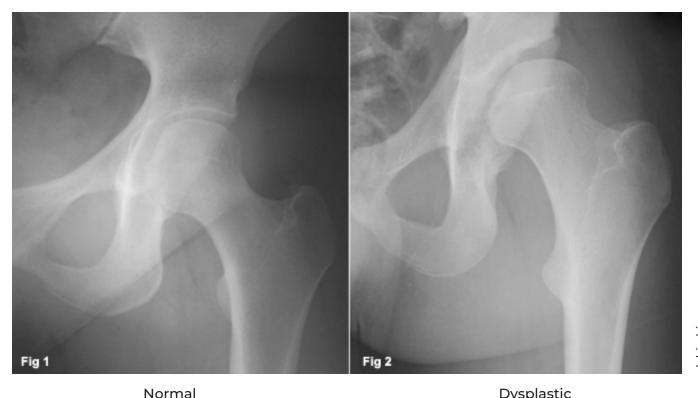
With your help of providing data following our surgeries, we will publish literature that will help define the best, most up-to-date practices in the world of hip preservation.

PatientIQ is a free service that is offered to every surgical patient in our busy hip preservation practice. After scheduling surgery, you will receive an email to sign up for PatientIQ. Please create a username and password to activate your account. PatientIQ helps Drs. Ellman and Hugate collect patient outcomes before and after each procedure, so please take the time to fill these out, even if it's 1-2 years after your surgery!



# **The Basics**

### The Basics Hip Dysplasia

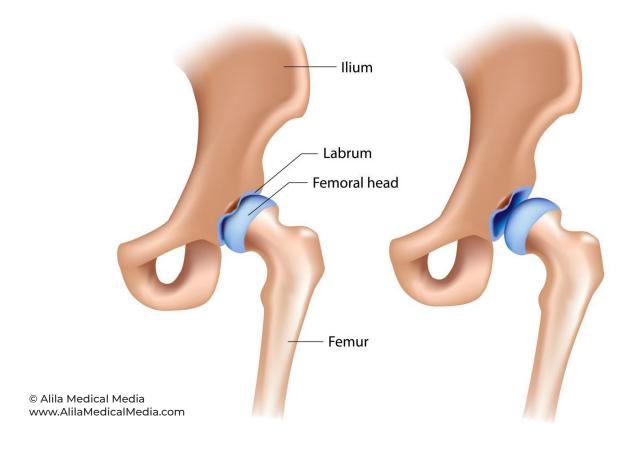


Dysplastic

- Hip dysplasia is a complex issue when your acetabulum (socket) does not form completely as an infant.
- A normal acetabulum forms directly over the femoral head (ball), but patients with dysplasia have a socket that is too shallow or too steeply angled to support the ball effectively.
- This can cause pain and premature arthritis over time. It can even cause hip dislocation.
- The lack of adequate bony coverage puts the acetabular labrum (a ring of soft tissue made of fibrocartilage) at risk for injury and tearing.
- Women are more likely to be affected than males by almost 4 times.
- Dr. Hugate has several short informative videos on the Panorama website. Please take the time to view these: www.panoramaortho.com > Services & Treatments > Hip Preservation & Hip Arthroscopy.

### **Hip Labral Tear**

- 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). This can lead to cartilage damage and progression of arthritis.



# The Basics

### **Cam Impingement**

- 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 thus 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 to females.



Normal

Dysplastic

# Exercises

### **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 1: Do these 3x10 on each leg daily. For all other exercises, start with 1x10, with good form, 2-3 times per week. If you have pain or if you are unable to complete without good form, skip that exercise.

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

Do not overstretch. You can do light stretching, gently holding 3x30 seconds.

### A. Standing Hip Abduction in Internal Rotation

### 3 sets / 10 repetitions / 1x per 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.







# **Exercises**

### **B.** Bridges

Choose one exercise per day.
1 set / 20-30 repetitions / 3x per week

For each exercise, continue each repetition when you are able to hold stable and feel no pain.





**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 lying 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. Side-Lying Glute Medius Clams**

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

Please avoid side-lying straight leg raises as the joint reaction force is greater in this position. (Clams, as pictured, are okay to perform.)

**Neutral Hip Clams:** Lying on your side, hips **straight** and knees bent to 90 degrees, engage transverse abdominis (TA) and squeeze glute to raise top knee without shifting pelvis. Heels remain together throughout. Do not allow spine to collapse to table.





### **D. Hip Extensions**

Keeping chest flat on table, engage TA, then squeeze glute and lift heel toward the ceiling. Keep hips touching table. Repeat 20 times.





# **Exercises**

### E. Romanian Dead Lift

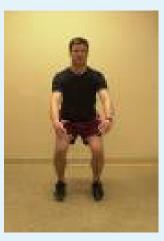
Keeping knee straight, reach down toward the floor as you lift one leg toward the ceiling. With a flat back, reach down until you feel a light stretch in the hamstring. Stand up tall to return to start position.



### **Double-Leg Squats**

### 3 sets / 30 repetitions / 1x per day

Start standing with feet shoulder-width apart. Bend at the knees, sitting back as if into a chair, to 60 degrees. Do not allow knees to go past toes.





### **Bridge with Ball (heels on ball)**

### 10 repetitions

Keep TA drawn in. Slowly lift up hips, and keep them even and controlled throughout motion.





### **Bridge with Ball to Hamstring Curl**

### 10 repetitions

Dig heels into the ball, and pull heels toward buttocks, keeping hips high and controlled.







# **Exercises**

### **Toe Bridges**

### 10 repetitions

Keep TA drawn in. Slowly lift up hips, and keep them even and controlled throughout motion.





# Be well, stay active, and keep moving!

<b>Hip Arthroscopy Non-Covered Service Waiver</b>
Patient Name DOB:
Responsible Party (if minor)
Non-Covered Service Waiver
[ ] Standard Flat Fee: There are several unlisted hip procedures (CPT code 29999/27299) that are deemed medically necessary per Dr. Ellman's expertise to achieve optimal outcomes following surgery. The following procedures have been demonstrated in the literature to result in improved clinical outcomes following hip arthroscopy:
<ul> <li>Capsular repair</li> <li>Capsular imbrication or plication</li> <li>AllS or subspine decompression</li> </ul>
At least one of these procedures is performed in every case by Dr. Ellman. Unfortunately, these services are still considered "investigational or unproven" by insurance companies and are not reimbursed. Therefore, Panorama will collect a flat fee of \$500 before your hip arthroscopy procedure. This fee is required to continue the surgical process with Dr. Ellman.
I understand that I am responsible for the standard flat fee payment of \$500 prior to my hip arthroscopy procedure.
Signature of Responsible Party Date
[ ] Labral Reconstruction: In some cases, Dr. Ellman may perform a labral reconstruction procedure. A labral reconstruction may be performed in revision settings if a labral repair or debridement has previously failed or in rare primary settings when the labrum is too severely damaged to repair. During this procedure, a graft is used to reconstruct a new labrum from cadaver tissue. Labral reconstruction procedures are considered "investigational" by some insurance companies, despite studies demonstrating excellent success rates. If Dr. Ellman performs a labral reconstruction in your hip, you may be charged an additional \$1,500 after surgery to cover costs associated with the procedure. We will always attempt to charge your insurance company first, but if your insurance company elects not to pay, you may be responsible for payment following surgery.
I understand that, in the event of a labral reconstruction procedure, I may be charged an

**Signature of Responsible Party**