Panorama Hip Preservation Pre-Operative Guidebook





Michael Ellman, MD

Welcome

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, Nicole Anderson, Barbara Wright and Molly Bryan (Physician Assistants), 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.

<u>You</u> 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 rebalancing 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: drellmanpc@panoramaortho.com

Office: 303-233-1223

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Contact Information

Contact Information for Dr. Michael Ellman

Clinical Liaison/Surgery Scheduler:

Samantha Gutierrez

Phone: 303-233-1223

Ext: 6605

Fax:

720-497-6730

Email:

drellmanpc@panoramaortho.com

Important Phone Numbers

Department	Reasons to Call	Contact Information
Care Navigation (Triage Dept) (7am-5pm M-F) *Excluding Holidays	☐ Medical questions or concerns that require immediate attention	Call: 303-233-1223 Extension 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	☐ Schedule follow up appointments and office visits ☐ Answers questions regarding patient appts	Call: 303-233-1223 Option 2, then option 1
Disability/FMLA Paperwork)	□ Questions and concerns regarding disability, FMLA, return to work forms **Please allow 5-7 business days for completion**	Fax forms to: 720-497-6730 Email: drellmanpc@ panoramaortho.com or drop off paperwork in person at any office
Pre-Authorizations (9am-4:30pm M-F) *Excluding Holidays	□ Insurance authorization questions and concerns regarding surgery, injections and imaging ordered by physician (MRI, CT, ultrasounds, EMG's)	Call: 303-233-1223 Extension 1011
Panorama Physical Therapy	☐ Schedule physical therapy appointments ☐ Questions or concerns for your Therapist	Centralized Scheduling Office 303- 274-7330
Billing and Customer Service Office	Questions on Insurance or Billing	720-497-6637
OrthoColorado Hospital	☐ Pre-Admit Testing Questions ☐ Check-in and Surgery Times)	720-321-5450 720-321-5170
Littleton Hospital	☐ General Questions ☐ Check-in and Surgery Times	303-730-8900 (main hospital line)
South Denver Surgery Center	☐ General Questions ☐ Check-in and Surgery Times	
CPM Questions	□Questions about CPM, problems with CPM	1-800-845-6364
Hip Brace Questions	Questions about use of hip brace / settings	DME staff P: 303-233-1223 x1600

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 6605.

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, you will need to contact Samantha Gutierrez to set up a surgical date. We then submit the surgery order to your insurance for approval. 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 6605 or email drellmanpc@panoramaortho.com
☐ Once you schedule a surgical date, you will receive a call from a hospital administrato 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.
☐ We operate at several locations. Please make note of which facility your surgery will be performed. These are the locations we operate out of:
OrthoColorado Hospital (connected to St. Anthony's Hospital)

11650 W. 2nd Place Lakewood, CO 80228

Littleton Adventist Hospital 7700 S. Broadway Littleton, CO 80122

South Denver Surgery Center 300 E. Mineral Avenue, Suite 9 Littleton, CO 80122

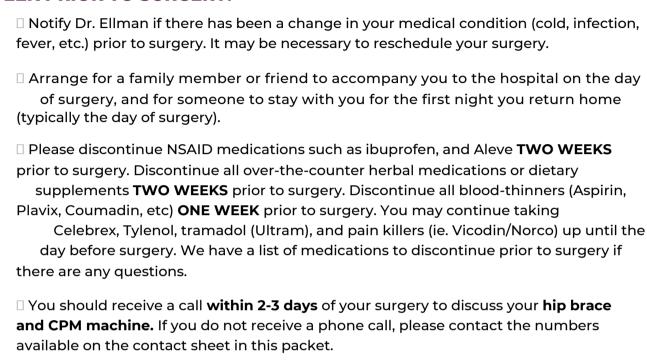
Preoperative Checklist

1-4 WEEKS PRIOR TO SURGERY:

For patients with underlying medical conditions (i.e. heart disease, diabete etc), a pre- operative clearance must be obtained by your primary care ph within 30 days of your scheduled procedure.	-
☐ Cancel any dental appointments within 6 weeks of your surgery.	
□ Notify Dr. Ellman if you are having any medical procedures done within 6 w your surgery.	eeks of
Avoid any cortisone injection into the affected hip within 6 weeks of your surg	gery.
Discontinue birth control 1 month prior to your surgery.	
Adjust work/social schedule accordingly during your anticipated recovery tim	ıe.
Practice the exercises listed at the end of this packet as these will help with y strength after surgery.	our
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 ai healing process.	

Pre-Operative Checklist

1 WEEK PRIOR TO SURGERY:



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, sweat pants or pants that are easy to put on and take off, crutches and 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.

Pre-Operative Checklist

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 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 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 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

Hip Arthroscopy Non-Covered Service Waiver

Patient Name	DOB:
Responsible Party (if minor) —————	
Non-Covered Service Waiver	
are deemed medically necessary per Dr.	nlisted hip procedures (CPT code 29999/27299) that Ellman's expertise to achieve optimal outcomes res have been demonstrated in the literature to result hip arthroscopy:
□ Capsular Repair	
☐ Capsular Imbrication or Plication	
☐ AIIS or Subspine Decompression	
services are still considered "investigation	med in every case by Dr. Ellman. Unfortunately, these nal or unproven" by insurance companies and are not llect a flat fee of \$1000 before your hip arthroscopy he the surgical process with Dr. Ellman.
I understand that I am responsible for the	e standard flat fee payment of \$1000 prior to my hip
arthroscopy procedure.	
Signature of Responsible Party Date	
[] Labral Reconstruction/Augmentation	: I In some cases , Dr. Ellman may perform a labral
performed in revision settings if a labral reprimary settings when the labrum is too a graft is used to reconstruct a new labrua augmentation procedures are considered despite studies demonstrating excellent reconstruction/augmentation in your hip surgery to cover costs associated with the	re. A labral reconstruction/augmentation may be repair or debridement has previously failed, or in rare severely damaged to repair. During this procedure, am from cadaver tissue. Labral reconstruction/d "investigational" by some insurance companies, success rates. If Dr. Ellman performs a labral by you may be charged an additional \$1,500 after the procedure. We will always attempt to charge your not to pay, you may be responsible for payment
·	reconstruction or augmentation procedure, I may be
charged an additional \$1,500 following su	urgery to cover costs associated with the procedure.
Signature of Responsible Party Date	

An Important Message From Dr. Ellman







Your Participation Makes a Difference! Please Sign Up and Respond to Patient IQ. Why???

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.

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 signing up for 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 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!

Surgery Descriptions

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.
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.
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 re-create 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.

Surgery Descriptions

capsular pli	lication: A plication is done in some cases to tighten a loose capsule. During a cation, the capsular tissue is overlapped and closed with sutures to hold the other, adding stability to the joint.
inflammatic	my : A synovectomy is performed in patients who exhibit significant on of the lining of the joint. During this procedure a heat probe is used to irritated tissue.
	ochanteric Bursectomy: In this procedure, the arthroscope is inserted into the ric bursa on the outside of the hip joint and a shaver is used to shave and removersal tissue.
the hip to th	and Release: The Iliotibial band (ITB) is a thick band of tissue that runs from the knee along the outer side of the thigh. A release is done when the ITB is tight, causing irritation (bursitis) to the outer aspect of the hip.

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 5 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 5 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 81mg twice daily.

You will take this medication for a total of 21 days after surgery. Do NOT take ibuprofen, motrin, advil, aleve, or naproxen while taking this medication.

□ Oxycodone (Optional):

This medication is for pain.

This medication is to be taken AS NEEDED.

Plan to stay on a scheduled dose of 1-2 tablets every 4 hours for the first 2-4 days after surger y.

After 2-4 days you should be able to space out or discontinue the medication.

Do not drive, drink alcohol while taking this medication.

Post-Operative Instructions

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

□ 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):

Wound Care and Showering	
oxdot 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 whil showering, this is OK; however, we prefer to keep the wounds dry during the first 5 days after surgery. 	е
$_{ m oxedsymbol{oxed}}$ In between showers, leave open to air with steri strips in place.	
$_{ m oxedsymbol{eta}}$ Do not apply lotions or ointments to the incisions.	
$_{ m oxed}$ Your stitches are absorbable under the skin – you will not need stitches removed after surger y.	
□ 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	
$\ \square$ Physical therapy should start ideally within the first couple days after surgery.	
$\ \square$ 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 physical therapy 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.	

 $\hfill\square$ At your first physical therapy visit, your therapist should instruct you on proper weight

hip.

bearing and teach your family members how to perform passive, light circumduction of the

Post-Operative Instructions

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/augmentation 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). \square 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.

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	-

□ t	If using the ice machine, the machine will automatically stay on to provide continuous low temperatures and limit inflammation postoperatively
t	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. 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.
Co	ontinuous 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 post-operatively.
ā	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.
Π,	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
C	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.
i	To help in the prevention of lower back pain, try and maintain proper spine alignment while n 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).

Post-Operative Instructions

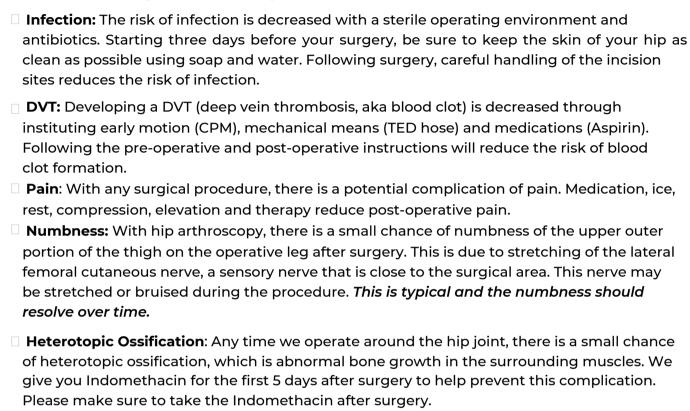
Biking
$\ \square$ Gentle, no resistance, upright, stationary biking can begin the day after surgery.
□ Do NOT use a recumbent bike! NO Nustep!
$\hfill \Box$ Use non-operative leg to push the operative leg around gently.
\square 20 mins on upright bike = 1 hour on motion (CPM) machine.
☐ You do not have 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.
$\hfill \square$ 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) one week after a right hip surgery, and about four days after a left hip surgery. You must be off all narcotics and fee comfortable before driving

Follow-Up
□ A follow up visit will be scheduled with Barbara Wright or Nicole Anderson (Physician Assistants) 10-14 days following your surgery.
$_{ m oxedge}$ 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
☐ All other follow up appointments will be made with Dr. Ellman
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 develop calf swelling or calf pain after surgery

 $\hfill \square$ You experience any chest pain or difficulty of breathing

Post-Operative Instructions

Possible Postoperative Complications and Risks



Dr. Ellman was one of the first surgeons in the United States to begin utilizing post-free distraction during hip arthroscopy. The advantages of this technique eliminate any nerve injury to the groin, including the pudenal nerve and surrounding soft tissues.

Ice Machine

DONJOY Iceman Classic 3 Cold Therapy Unit

Cold therapy unit helps patients and medical practitioners easily manage post-operative pain and swelling, speeding up patient recovery and rehabilitation. The cold therapy unit can be purchased at the locations listed below. No appointment or reservation is needed to pick up. Please call to confirm availability (303-233-1223 ext.1600).

Item Price: \$195.00 plus tax (this item is not billable to insurance).



Westminster	Golden	Highlands Ranch
14190 Orchard Parkway Suite 200 Westminster, CO 80023	660 Golden Ridge Rd. Suite 250 Golden, CO 80401	1060 Plaza Drive Suite 200 Highlands Ranch, CO 80129

User Tips:

56. 11ps.
\square If you are planning on bringing your cold therapy unit to recovery after surgery please
ave it sealed in the box.
🗆 Frozen disposable plastic water bottles can be used as a "reusable" ice cube. You can
t 3-4 standard size (16.9 oz.) water bottles inside the unit. Keep an additional 3-4 in
ne freezer to swap back and forth. Be sure to take the labels off of the disposable
astic water bottles in order to prevent the paper from coming off in the water
nd clogging the motor. Refresh the water daily to help keep the unit sanitary.
Patients should ice 20 minutes on and 40 minutes off unless instructed otherwise by
our physician. The easiest way to remember this is to ice for 20 minutes every hour
a the hour

 $\hfill\Box$ To clean, circulate warm water and 1-2 Tablespoons of white vinegar. Be sure to clean prior to storing.

☐ All units are non-refundable once they have been used. The unit has a 6 month manufacturer' warranty. If any manufacturer issues arise with the unit please bring it to the point of purchase with the receipt in order to repair or replace the unit. We are not able to honor warranty replacements without a receipt present.

For questions **please call: 303-233-1223 ext. 1600**. If we are unable to answer please leave a voicemail. We aim to respond within 24 hours.

Hip Preservation Physical Therapy Exercises

Please Note: Sets and repetitions are based on low intensity guidelines. All below exercises are appropriate for pre-operative preparation for hip preservation surgical interventions.

Lower Extremity Stretching

These stretches are safe to perform prior to surgery in a pain-free range



HAMSTRING STRETCH WITH TOWEL/STRAP

While lying down on your back, hook a towel or strap under your foot and draw up your leg until a stretch is felt along the backside of your leg. Ensure opposite knee is bent and that your knee on the leg being stretched is in a straightened position.

3 sets, 30 second hold, 1-2x/day



SINGLE KNEE TO CHEST STRETCH

While lying on your back, hold your knee and gently pull it up towards your chest. Keep opposite knee bent.

3 sets, 30 second hold, 1-2x/day



PIRIFORMIS STRETCH

While lying on your back, hold your knee with one hand and your ankle with the other. Pull your leg up and over towards the opposite shoulder as shown.

3 sets, 30 second hold, 1-2x/day Perform as tolerated as pain allows



CALF STRETCH WITH TOWEL - GASTROCNEMIUS

While in a seated position, place a towel around the ball of your foot and pull your ankle back until a stretch is felt on your calf area. Keep your knee in a straightened position during the stretch.

3 sets, 30 second hold, 1-2x/day

Knee/Hip/Core Strengthening

These strengthening exercises are safe to perform prior to your hip surgery in a pain-free range



ABDOMINAL BRACE

Laying on your back with your knees bent, draw in your belly button as if putting on a tight pair of pants. It should feel like you are flattening or pushing your back into the table/bed.

2 sets, 10 repetitions with 10 second hold, 1-2x/day



STRAIGHT LEG RAISE - SLR

While lying on your back, raise up your leg with a straight knee. Keep the opposite knee bent with the foot planted on the ground. Ensure core muscles are activated.

2 sets, 10 repetitions, 1-2x/day



STRAIGHT LEG RAISE ABDUCTION

While lying on involved side raise top leg up towards ceiling without allowing top hip to roll backwards. Keep body in one straight line from head to toe.

2 sets, 10 repetitions, 1-2x/day



BRIDGING

While lying on your back with knees bent, tighten your lower abdominals, squeeze your buttocks and then raise your buttocks off the floor/bed as creating a "Bridge" with your body. Hold and then lower yourself and repeat.

2 sets, 10 repetitions 3 second hold, 1-2x/day

Hip Preservation Physical Therapy Exercises



HIP ADDUCTION SQUEEZE - SUPINE

Place a rolled-up towel, ball or pillow between your knees and press your knees together so that you squeeze the object firmly. Ensure core is activated. Hold and then release and repeat.

2 sets, 10 repetitions 10 second hold, 1-2x/day



SUPINE HIP ABDUCTION - CLAMSHELL

Lie down on your back with your knees bent, tighten your core and then draw your knees apart.

2 sets, 10 repetitions, 1-2x/day



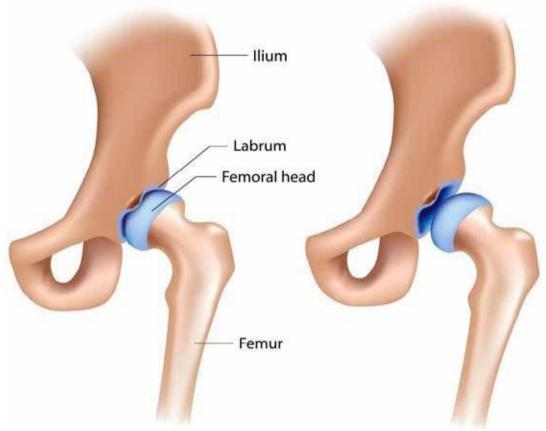
LONG ARC QUAD

While seated with your knee in a bent position, slowly straighten your knee as you raise your foot upwards as shown. Ensure core muscles are activated.

2 sets, 10 repetitions, 1-2x/day

Anatomy

Hip Labral Tear



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- ☐ 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.
- $_{\hfill \square}$ 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.

Anatomy

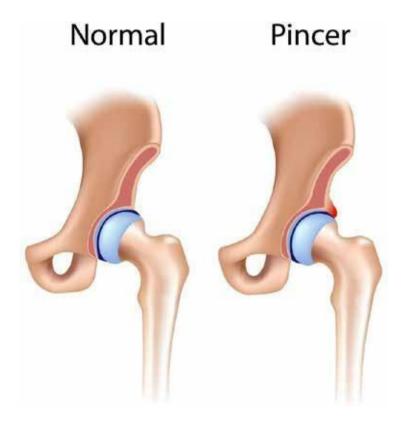
CAM Impingement



- ☐ 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 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 \Box and articular cartilage injury.

Cam impingement has approximately a 3-to-1 predilection for males to females.

Pincer Impingement



- ☐ 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.

Notes



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