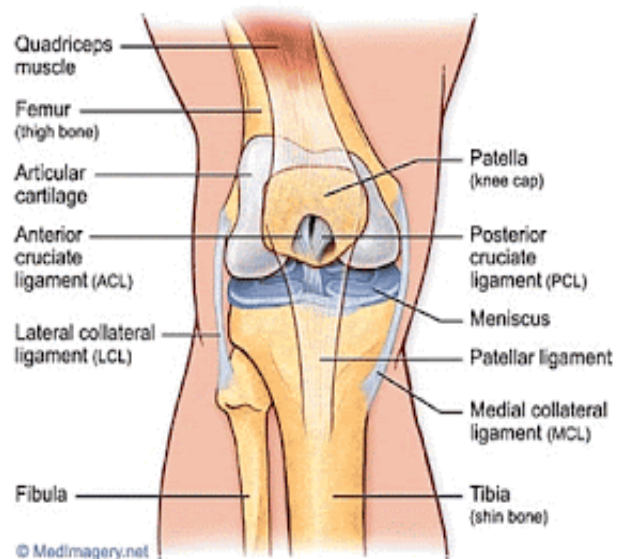


KNEE ARTHROSCOPY- GENERAL INFORMATION

Dr. Sean Robinson, M.D.

General Knee Anatomy

- The knee is composed of three bones: the thigh bone (femur), kneecap (patella), and shin bone (tibia).
- Because the knee is under constant pressure from our body weight, there are two “shock absorbers”- the menisci (lateral and medial meniscus), that sit between the femur and tibia.
- Ligaments provide knee stability. There are four main ligaments: the medial and lateral collateral ligaments, and the anterior and posterior cruciate ligaments.
- Tendons that arise from muscles, attach to the bones to help the knee move as a hinge joint.



Common Knee Injuries

- **Meniscal tear**- A meniscal tear, whether it be to the medial and/or lateral meniscus, is a common injury seen in sports medicine. It may occur from chronic wear and tear, or from an injury, usually twisting. Symptoms usually include pain, stiffness, clicking, popping or sticking of the knee. Arthroscopic surgery may be warranted in patients with a meniscal tear.
- **Ligament injury**- An ACL tear is another common injury, particularly in young athletes, that is commonly seen in sports medicine. Injury to the ACL may be accompanied by a “pop” and sharp pain, followed by the inability to bear weight on the leg. An ACL tear is frequently operated on arthroscopically. The PCL can also be injured though less commonly than the ACL.

What is a knee arthroscopy?

- A knee arthroscopy, also known as a “knee scope”, is a minimally invasive surgical procedure in which a small camera, called an arthroscope, is inserted through small incisions (~ 1-2 cm) in the skin to fully evaluate the anatomy of the knee. By way of the incisions and with the use of the arthroscope, small surgical tools may be used to help clean up a meniscus, repair an ACL, or breakdown built up scar tissue.
- It is important to note that a knee arthroscopy for meniscal repair does not get rid of, or improve, any underlying knee arthritis or related arthritic pain. The surgery should, however, help with pain related to the meniscal injury.

Common knee procedures

- **Anterior Cruciate Ligament Reconstruction**

- Autograft (bone-patellar tendon-bone) particularly in those <40 who are engaged in pivoting/ lateral movement activities. Recommended for all young athletes as the gold standard
- Allograft (cadaveric tendon): This is often used in those >40 years old or those who not engaged in quite as concerning activities that put the ACL at risk

- **Meniscus repair v debridement:** Repair will always be attempted if the tear is amenable and likely to heal. In a young individual, saving the meniscus is critical to longevity of your knee joint.

- **Chondroplasty:** If there is cartilage wear or loose cartilage, this is gently derided to create a stable base.

- **Patella stabilizing surgeries**

- Medial patellofemoral ligament reconstruction: this ligament is a restraint to lateral dislocation of the patella. It is reconstructed with an allograft
- Tibial tubercle osteotomy: the insertion point of the patella tendon on the tibia is moved to improve the vector of force on the patella thereby improving patella tracking.

- **Realignment osteotomies**

- High tibial osteotomy: this is recommended in those with medial compartment wear in order to offload that compartment to prevent further degeneration of cartilage
- Distal femoral osteotomy: this is recommended in those with valgus (knock knee) with either lateral compartment wear or patellar instability to allow for improved alignment and mechanics.
- These may coincide with ligament or cartilage restoration procedures

- **Cartilage restoration procedures**

- MACI - Matrix Autologous Chondrocyte Implantation: this procedure is a two stage procedure in which a focal cartilage defect is "filled" and repaired with native cartilage.
- Osteochondral allograft: this procedure is for larger defects or those with involvement of subchondral bone (bone beneath the cartilage). A cadaveric allograft is utilized to repair the damaged section of cartilage.

KNEE ARTHROSCOPY- GENERAL INFORMATION

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Postoperative Pain Expectations

The aim of knee surgery is to decrease pain, improve knee motion, and result in a better quality of life. We do our best to minimize postoperative pain by prescribing the medications below, but it is important to note that some level of discomfort is to be expected the first few days following surgery. You may experience knee swelling and stiffness after surgery, this is to be expected for the first few days to weeks following surgery.

Postoperative Pain Medications and Instructions

- **Percocet v Norco 5/325 mg (oxycodone 5 mg/acetaminophen 325 mg) ***Optional**
 - Take 1 or 2 tabs every 4-6 hours as needed for postoperative pain.
 - Percocet is a narcotic pain medication and may cause **constipation**. If constipation occurs, you may use **Miralax or Colace** which can be purchased over the counter at your local pharmacy.
 - Percocet should not be taken in combination with prescribed sleep medication.
 - **It is not safe to use more than 4,000 milligrams of acetaminophen in one day (24 hours).**
 - *If you are regularly prescribed pain medication from another provider, you will need to call your pain medication prescriber for postoperative narcotic pain medications.*
- **Ibuprofen 800 mg (Advil); an NSAID (Non-steroidal Anti-inflammatory) ***Optional**
 - Take 1 tab by mouth, with food, every 8 hours as needed for postoperative pain.
 - If you have renal impairment or take blood thinners other than aspirin, please discuss the use of Ibuprofen with your primary care physician prior to its use.
 - Other NSAIDs (i.e. Aleve, Motrin, Meloxicam, etc.) should not be taken with Ibuprofen.
- **Aspirin 81mg:** This is to prevent blood clots. Though the risk of blood clot is very low in this surgery, I prefer to limit that risk with a low dose aspirin for 30 days.

Other Important Notes

- We recommend that for the first night and day following shoulder surgery, patients take the Percocet and Ibuprofen (if tolerated). As pain improves you may stop the Percocet and take the Ibuprofen and Tylenol (acetaminophen) as needed.
- Many patients find they may have improved pain in the daytime hours following their operation, with continued pain at night. In these instances, pain medication (Percocet) may be used. If you have a history of sleep apnea or respiratory problems, you should discuss medications with your primary care provider prior to their use.
- Your pharmacist is a great resource for medication questions. You may also call our office with any questions preoperatively.

**KNEE ARTHROSCOPY- TIMELINE AND INSTRUCTIONS
CALENDAR LAYOUT**

5 Days Before Surgery	2 Days Before Surgery	1 Day Before Surgery	Day of Surgery	Post-op Day 1	Post-op Day 2	Post-op Day 3+
<ul style="list-style-type: none"> • Stop blood thinning medications (i.e. Advil, Aleve, Aspirin, Fish Oil, Vitamins, Supplements, etc.) • Ensure you have attended your pre-operative clearance appointment with your primary care provider. • Do not shave surgical area. 	<ul style="list-style-type: none"> • Begin cleansing the surgical site with Benzoyl Peroxide 10%. Apply wash to the surgical site region, allow to sit for 3 minutes, rinse off. • Place ice packs in freezer. • Ensure medications have been picked up from pharmacy. See attached sheet for medication instructions. • Purchase press & stick saran wrap for showering 	<ul style="list-style-type: none"> • Wash surgical site with Benzoyl Peroxide solution again. Follow same instructions. • The surgical center will reach out to you today to relay your surgical time. Surgical times are subject to change, please keep your schedule open. • Ensure you have spoken to your transportation, a friend of family, regarding your transportation home. Patients will not be discharged to a Lyft, Uber or Taxi. 	<ul style="list-style-type: none"> • Morning of: Wash surgical site with Benzoyl Peroxide solution again. Follow same instructions. • Stop all food and drink at midnight the day of surgery. • Bring DVD or USB if you would like surgery recorded. • Evening: Start medications. See attached sheet for medication instructions. • Begin icing. 	<ul style="list-style-type: none"> • Continue to ice the knee. • Take medications as instructed. • No showering. • Start aspirin 81 mg twice daily for 14 days. • Use crutches as needed. 	<ul style="list-style-type: none"> • Continue to ice the knee. • Take medications as instructed. • You may remove the bulky outer dressing. DO NOT REMOVE STERISTRIPS- these will be removed at postop visit. • Showering may begin but INCISIONS MUST STAY COVERED- use saran wrap. • BEGIN GENTLE RANGE OF MOTION EXERCISES. Reference postop exercise sheet for instructions. Continue to do these twice daily. 	<ul style="list-style-type: none"> • Continue to ice knee. • Take medications as needed. • CONTINUE GENTLE RANGE OF MOTION EXERCISES. Reference postop exercise sheet for instructions. Continue to do these twice daily. • See us for your scheduled post-operative appointment. We will remove your steri-strips at this visit.

KNEE ARTHROSCOPY- TIMELINE AND INSTRUCTIONS

Dr. Sean Robinson, M.D.

• BEFORE SURGERY

○ 5 days before surgery:

▪ Stop all blood thinning medications

- **Examples: Over the counter anti-inflammatories including: Ibuprofen, Advil, Motrin, Naprosyn, Aleve, Aspirin**

- Tylenol is okay to take before surgery.

- **Examples: Fish oil, Vitamins (i.e. E, C), Supplements, St. John's Wort, Glucosamine, etc.**

- Ensure pre-operative appointment with PCP has been completed, if required.

- Do not shave surgical area.

○ 2 days before surgery:

- Place ice packs in freezer.

- Purchase press & stick Saran Wrap.

- Ensure postop medications are picked up from pharmacy. See attached sheet for medication instructions.

○ 1 day before surgery:

- **Ensure you have a family or friend driving you home from surgery. Patients will not be discharged to an Uber, Lyft, taxi, etc.**

- The surgery center will call you 1 day before surgery with your arrival time and surgical time.

○ Day of surgery:

- **Stop all food and drink at midnight. You are okay to brush your teeth.**

- If you have high blood pressure, blood pressure medications need to be taken the morning of surgery.

- Wear a loose fitting or button up shirt to the surgical center.

- Keep your schedule open, surgical times are subject to change.

- **Bring a USB drive if you would like your surgery recorded.**

• AFTER SURGERY

○ Postop Day 1

- Ice the knee continuously for the first 24 hours, then every 20 minutes as needed.

- Start postop medications. Reference postop medication sheet for medication instructions.

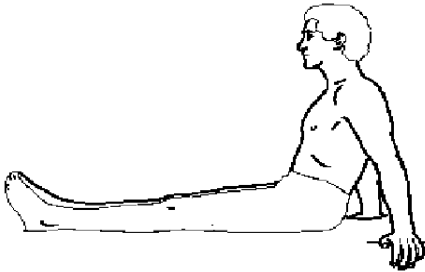
- Use crutches as needed.

- **Start aspirin 81 mg, twice a day for 14 days following surgery.**
- **Postop Day 2**
 - Continue icing as needed
 - You may remove bulky knee dressing. **Do NOT remove steri-strips.** These will be removed at your postoperative visit.
 - **You may shower but surgical incisions MUST remain covered.**
 - **Begin gentle range of motion exercises (page 7).**

KNEE ARTHROSCOPY- POSTOPERATIVE EXERCISES

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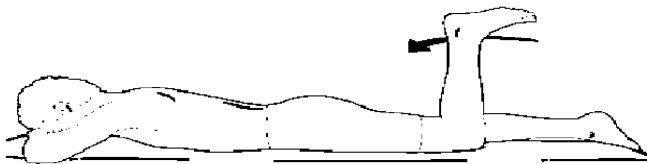
EXERCISES TO BEGIN TWO DAYS AFTER SURGERY



Strengthening: Quadriceps Set

Tighten muscles on top of thighs by pushing knees down into surface. Hold 10 seconds.

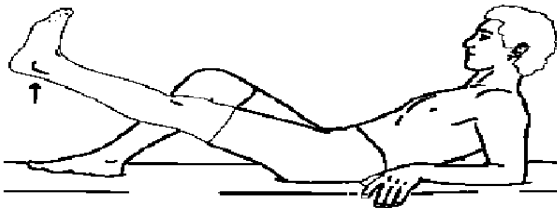
Repeat 3-5 times per set.
Do 1-2 sessions per day.



Self-Mobilization: Knee Flexion (Prone)

Bring your involved heel toward buttocks as close as possible.
Hold 20 seconds. Relax.

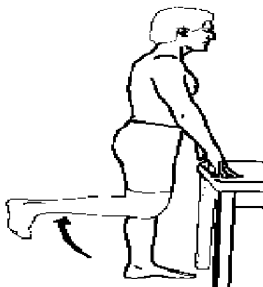
Repeat 5 times per set.
Do 1-2 sessions per day.



Strengthening: Straight Leg Raise

Resting on forearms, tighten muscles on front of your involved thigh, then lift leg from surface, keeping knee locked.
Hold for 3-5 seconds.

Repeat 3-5 times per set.
Do 1-2 sessions per day.



Strengthening: Knee Flexion (Standing)

With support, bend your involved knee as far as possible.
Hold for 3-5 seconds.

Repeat 3-5 times per set.
Do 1-2 sessions per day.



Benzoyl peroxide 10% Acne Face wash.

Wash knee and extremity with this starting 2 days before surgery, 1 day before surgery and on the morning of surgery.

Apply the solution to the rinsed knee for 3 minutes before washing it away. This will decrease your risk of surgical infection.

Do not use this solution after the surgery.

OR



If you cannot find benzoyl peroxide, use Hibiclens [ask pharmacist for location].

Wash knee and extremity with this starting 2 days before surgery, 1 day before surgery and on the morning of surgery.

Follow instructions on the bottle.

Do not use after surgery.

Pre-Op Shopping Checklist:

- **Post-op Meds**
- **Cleansing solution**
- **Gel Packs**
- **Miralax (if needed)**