

PATIENT'S GUIDE

# Knee Arthroscopy



MEDICINE *of* THE HIGHEST ORDER



**UR**  
MEDICINE

Orthopaedics  
& Rehabilitation

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# Welcome

Knee injuries can result from athletic events or from wear and tear of daily life. Regardless of the cause, knee injuries are often painful and can severely limit your function. At UR Medicine, it is our objective to provide you with the confidence you need to make your comeback. Our experience allows you to trust our ability to provide you with a successful outcome.

The UR Sports Medicine team understands the complexity of your injury, and will provide you with collaborative efforts to address all of your needs. Our expertise extends beyond surgical and rehabilitative care. We have specialized programs designed to help you return to your previous level of function, as well as meet individual wellness goals.

Thank you for allowing us to participate in your care. We will guide you each step of your recovery, to ensure you receive maximum improvement from your surgery.

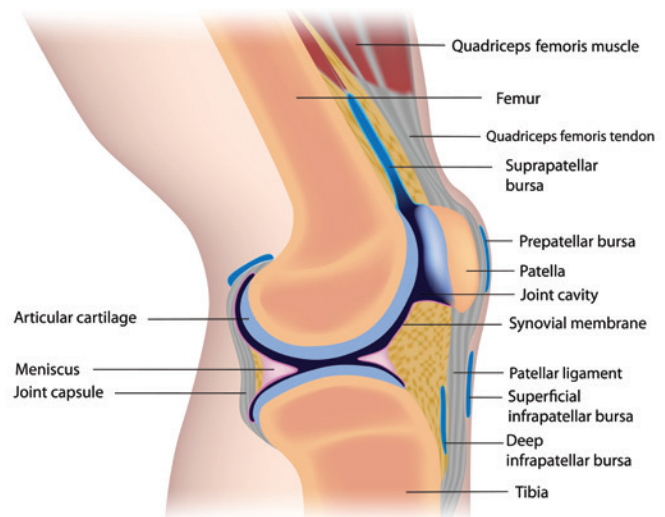
**Be sure to sign up for MyChart** so you can view test results, contact your doctors, and more. Visit [mychart.urmc.rochester.edu](https://mychart.urmc.rochester.edu).

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## The Knee

The knee is a joint that connects the femur (thigh bone), tibia (shin bone) and patella (kneecap). Combined efforts from surrounding tendons, ligaments, and muscles provide stability.



## Problems in the Knee

**Meniscus Tear:** Repetitive motion and/or traumatic events can cause tearing of the menisci (cartilage pads in the joint that act as shock absorbers). Symptomatic portions of the menisci may need to be removed or repaired.

**Ligament Sprain:** In the knee there are 4 main ligaments that contribute to joint stability; Anterior Cruciate Ligament (ACL), Posterior Cruciate Ligament (PCL), Medial Collateral Ligament (MCL), Lateral Collateral Ligament (LCL). Injury to the knee can cause any of these ligaments to be overstretched or torn. Severity of the injury will help your physician determine the best treatment plan for you.

**Fat Pad Impingement:** The fatty tissue underneath the patella can become irritated and swollen as a result of direct contact, hyperextension, or repetitive strain.

**Cartilage Defect:** A damaged area of cartilage may occur acutely, as a result of trauma. The cartilage can be torn or crushed, which may cause swelling and/or a sensation of locking or catching within the joint.

**Cartilage Wear:** The normal wear and tear of life may eventually damage the cartilage, the material that covers the surface of bones in healthy joints. When the cartilage softens or tears, it may cause pain, reduce available motion within the joint and limit function. The extent of damage can vary, from soft and unhealthy cartilage (chondromalacia) to high grade osteoarthritis.

**Loose Bodies:** Pieces of torn cartilage or bone may float around in the knee joint and cause locking or pain with certain movements.

**Patellar Instability:** This syndrome can be a result of trauma or abnormal anatomical alignment, where the knee does not have sufficient functional stability and the patella slides out of its normal position.

**Plica Syndrome:** A fold of synovial tissue that is located in the knee can become inflamed and painful following an injury or due to overuse.

## Arthroscopic Knee Treatment

**Knee Arthroscopy** is a minimally-invasive surgical tool used to look inside the knee joint to gain diagnostic information and perform surgical techniques. Small incisions are used to place an arthroscope (a camera) and surgical instruments inside the knee. Arthroscopic techniques that are most commonly performed during knee surgery include:

**Synovectomy:** Inflamed tissue that does not resolve with conservative treatment is resected to restore motion and reduce pain.

**Chondroplasty:** Loose cartilage flaps are smoothed with an arthroscopic shaver to reduce their risk of catching within the joint.

**Loose Body Removal:** Floating pieces of cartilage/bone within the joint are removed.

**Meniscal debridement/Partial Meniscectomy:** Irreparable portions of the meniscus that have frayed or torn are removed from the joint.

**Meniscal Repair:** In some instances, the torn piece of meniscus occurs within an area with a sufficient amount of blood supply, allowing for repair of the tissue. In this case, suture(s) are used to repair the torn section of meniscus to encourage it to heal.

**Microfracture:** When cartilage that covers bone is severely damaged, a microfracture procedure may be performed to stimulate production of healthy tissues. Small holes drilled into the bone release new cells that may replace the damaged cartilage.

## Risks Associated with Knee Surgery

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

### Infection

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

- Increased redness, swelling or pain at the incision site or surrounding areas.
- An odor, increase in drainage, or yellow/green drainage.
- A fever greater than 101° F.

### **Blood Clots**

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

Signs of Blood Clots: swelling in the leg/calf that does not go down (especially overnight). Increased pain, tenderness, redness or warmth in your leg. **If you notice these symptoms call your physician or to the nearest Emergency Department immediately.**

### **Bleeding**

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

### **Nerve Damage**

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

### **Risks of Anesthesia**

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

## **How Do I Prepare for Surgery?**

### **Pre-operative appointments**

To schedule your knee surgery, you will be directed to call your physician's office at your convenience. You will be provided with a surgery date, surgery instructions and a date for a post-operative follow-up appointment.

Prior to your surgery date, your surgeon may request that you attend a preoperative rehabilitation appointment. During this time, a physical therapist (PT) or athletic trainer (ATC) will review crutch ambulation, mobility tasks, and immediate postoperative exercises for you to perform. Please ask any questions you have about functional tasks to improve your ability to care for yourself after surgery.

You will be contacted by Sawgrass Surgery Center for surgical prescreening within 3 days of scheduling your surgery. You **MUST** be available by phone to go through the prescreening process with the nurse, or your surgery could be delayed. If you have not completed this call within 5 days of scheduling surgery, please call 585-242-1408.

If your surgery is associated with a **worker's compensation claim or motor vehicle accident**, please make the office aware at the time you schedule. Please mail or fax all paperwork that needs to be completed to your surgeon's office at the time your surgery is scheduled. This paperwork will not be completed until after your surgery is performed. The length of time you will be out of work will vary depending on the type of work you do and the procedures that were performed during your surgery. Follow-up paperwork must also be mailed or faxed to your surgeon's office to be completed. It should not be brought with you to your follow-up appointments.

### Quit Tobacco Use

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

### Stop NSAIDs

7 days prior to surgery you must **STOP** taking any non-steroidal antiinflammatories (NSAIDs) such as ibuprofen (Advil, Motrin), Naproxen (Naprosyn, Aleve) or Indomethacin (Indocin). Please read all over-the-counter medications before taking them, as some contain NSAIDs (i.e. cold medicines).

**Note: Your surgeon may provide you with alternate individualized instructions.**

### 24 Hours Before Surgery

After 2:00 pm the day before your surgery, you will receive a call from Sawgrass Surgery Center informing you of the arrival time for your surgery and final instructions. If you do not receive this call by 5:00 pm, please call 585-242-1401.

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

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

***If you have further questions about pre-operative instructions, please call (585) 242-1401 the surgery center and ask to speak with a nurse.***



## What should you bring to the surgery center?

Please be sure to bring your Driver's License/Photo ID and medical insurance cards. If you have crutches, please bring them with you. If you do not have them, be sure to tell the nurse when you arrive at the surgery center and they will be provided for you. Be sure to wear loose clothing that you will be comfortable in after your surgery.

Do not bring make-up, piercings, jewelry, money, credit cards or any other personal valuables. Sawgrass Surgery Center is not responsible for lost or stolen property.

## The Day of Surgery

When you arrive at the surgery center you will be taken to the pre-operative area where your surgeon(s) and anesthesiology team will meet with you to discuss the surgical plan. Nurses will start an IV and may give you medication to help you relax.

You will be wheeled on your bed to the operating room, where the anesthesiologist will administer general anesthesia. You will be constantly monitored to evaluate your breathing and heart rate. When the surgery is complete, you will be moved to the post-anesthesia care unit (PACU). The nurses and anesthesiology team will make sure you are comfortable. Your family members will be brought in to visit you when you wake up. When you are awake and alert with controlled pain, you will be discharged to go home.

## Caring for Yourself at Home

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

### Do's and Don'ts

- Do use caution with household pets until you are in the house safely and seated.
- Do remove scatter rugs/hallway runners and tape down edges of large area rugs.
- Do keep electrical cords and phone cords out of the way.
- Do keep your home well lit, with nightlights, a bedside light and entry way lights.
- Do be very careful of water on the bathroom floor.
- Do practice getting around your house using crutches prior to your surgery (REMEMBER TO PRACTICE GOING UP AND DOWN STAIRS!)
- Do not push yourself too hard or too fast.

**Pain Control:** You may be given narcotic pain medication to take home with you. Use these medications as instructed when needed for pain. This pain medication may have Tylenol in it. Please discuss with your surgeon before taking additional Tylenol. Pain medication may cause constipation, so remember to drink plenty of fluids, eat a high fiber diet and, if needed, use stool softening medications as directed.

**Other ways to help reduce your pain include motion as directed by your physical therapist/athletic trainer, changing your position and icing.**

**Knee Dressing/Incision Care:** You may remove the outer bandage that is covering your knee 48 hours after surgery (leave the steri-strips over your incisions intact). You do not need to apply a new bandage, but should reapply the compression wrap. If you have stitches, they will be removed approximately 7-10 days following surgery. Do not apply any lotion, cream or antibiotic ointment to your incision until your surgeon advises that is is safe.

If you were placed in a knee immobilizer, do not remove your bandage or the immobilizer until your first physical therapy appointment.

**Bathing:** 48-72 hours after surgery and once you have removed your bandage, you may shower. You may not soak or submerge your knee for 2 weeks after surgery. In the first few days, you may take a sponge bath, but careful not to get your incisions wet.

**School/Work:** For a few weeks following surgery, sitting and standing for prolonged periods of time will be difficult for you. If you have a physically demanding job, you may miss up to 4-6 weeks of work.

**Icing:** Until you have no pain, soreness, warmth or swelling, you should be icing your knee frequently (at least 4 times) throughout the day. Avoid chemical ice packs, as they may cause frostbite and skin irritation. Crushed ice in a well-sealed bag or bags of frozen peas work well.

## Post-operative Rehabilitation Program

You will begin formal rehabilitation at our outpatient clinic 2-3 days after surgery. The rehabilitation program will be designed for you and your specific surgery. All restrictions will be reviewed with you at the surgery center, and at your first rehabilitation appointment. You will attend therapy until you have returned to all activities you would like to do, with approval from your surgeon.

Maximizing recovery after knee surgery requires several things: protection of your healing tissue, a gradual return of range of motion and strength, resolution of swelling and restoration of functional abilities. **You may begin the exercises below the day after surgery if you feel able, unless you have been otherwise directed by your surgeon.** If you attend a pre-operative appointment, a physical therapist/athletic trainer will review the program with you. It is best to have thoroughly reviewed and practiced this program PRIOR to your surgery. It is very important that you complete your program with perseverance and consistency in order to optimize your recovery.

The following exercises are to be performed **3 to 4 times per day** immediately following your surgery. You may feel some discomfort while performing some of the exercises, but as you perform the exercises your pain should lessen. **If you are not sure you are performing the exercises properly, or if you are experiencing increased pain during or immediately after you do them, stop the exercises until you consult with your physical therapist or athletic trainer.**

## Exercises

### Ankle Pumps

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

Pull toes back towards hip, then push down away from you (as if using the gas or brake pedal while driving ). Use a one count pace in each direction.

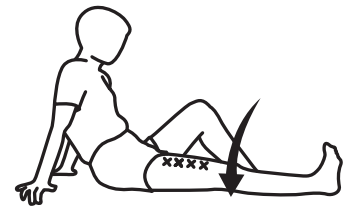
Perform 30 times, hourly.



### Quadricep Isometrics/Quad Sets (front of thigh)

With knee as straight as possible, contract the quad as if trying to straighten out your leg. Hold 5-10 seconds. Perform 10 times. These cues may help you isolate the quads better:

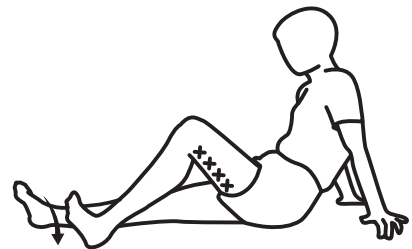
- “Think-see-feel” kneecap being pulled up towards your hip as the quad tightens.
- Feel your quad as you squeeze to see if it is getting tight.
- Attempt to press the back of your knee into the floor.



### Hamstring Isometrics/Heel Digs

Contract your hamstring by pushing your heel downward and pulling back as if trying to bend knee. You can do this while sitting up or laying flat on your back.

Hold 5-10 seconds. Perform 10 times increasing by 5s as tolerated until you are able to perform 30.



### Seated Knee Flexion

- Sitting , place your surgical leg on top of the opposite leg. Position lower leg off bed/chair. Use opposite leg to gently lower knee into a bend.
- Once your knee is bent hold for 15 seconds then lift up with your opposite leg to let it relax.
- Perform for 5 minutes at a time, up to 15 minutes if tolerated. Repeat every hour.



### Passive Knee Extension

- Sitting or lying on your back, elevate heel up on several pillows or a chair. Relax and allow knee to flatten down straight. Do not place a pillow under the knee.
- Hold for 5 minutes at a time, up to 15 minutes if tolerated. Repeat every hour.



## Follow Up Appointments

- 2-5 days after your surgery you will attend your first outpatient rehabilitation appointment. Throughout your recovery, you will continue to attend formal rehabilitation until discontinued by your surgeon.
- 1 - 3 weeks after your surgery you will follow up with your surgeon. At this appointment, your surgery and prognosis will be discussed.
- 6 weeks through 12 months after surgery: Your continued participation in rehabilitation and need to follow up with your surgeon will be dictated by the specific procedure you had, amount of pain you are in, limitations in strength and range of motion, and level of activity.

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## When to Call Us

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

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

Orthopaedics After Hours: (585) 275-5321.

## Important Addresses and Phone Numbers

Dr. Ilya Voloshin .....	(585) 276-3106
Dr. Robert D. Bronstein .....	(585) 275-1024
Dr. Brian D. Giordano .....	(585) 242-1327
Dr. John P. Goldblatt .....	(585) 275-6888
Dr. Michael D. Maloney.....	(585) 242-1430
Dr. Gregg T. Nicandri.....	(585) 276-4874
Dr. Lucien M. Rouse.....	(585) 341-9185

## Rehabilitation Locations

### BRIGHTON

Clinton Crossings  
4901 Lac de Ville, Bldg. D, Suite 110,  
Rochester, NY 14618  
(585) 341-9150

### GREECE

South Pointe Landing  
10 South Pointe Landing,  
Rochester, NY 14606  
(585) 225-6296

### BROCKPORT

Strong West  
156 West Avenue,  
Brockport, NY 14420  
(585) 637-0329

### PENFIELD

Platinum Office Building  
2064 Fairport Nine Mile Road, Suite 100  
Penfield, NY 14526  
(585) 851-0700

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