



Anterior Cruciate Ligament (ACL) Surgery

Arthroscopic knee surgery is an outpatient surgery. All patients go home the same day.

If you have any of the below listed conditions, please call the office and inform our staff immediately as this may have an impact on your surgery.

- **Personal or family history of blood clots (deep venous thrombosis/DVT).** It is **ESSENTIAL** to make us aware as it will be important to consult with your PCP to determine if peri-operative prophylaxis is recommended.
- Chest pain that may occur at rest
- Heart Failure
- AICD
- Recent heart attack (within the last 3 months)
- Recent procedure to place a stent(s) in the vessels of your heart (within the last 6 weeks)
- Tight heart valve (aortic stenosis)
- Use of oxygen at home
- Central sleep apnea
- Kidney failure requiring dialysis
- Liver failure requiring need for a liver transplant
- Recent neck injury requiring you to wear a collar
- Current pregnancy or recent fetal loss (within 4 weeks)

We will schedule a postoperative appointment approximately 3 weeks after surgery at the same time your surgery is set up. Once this is scheduled, if you need to change it for any reason, please call the office.

You must not eat or drink anything, including gum or candy after midnight the night before your surgery as your surgery WILL be cancelled.

Even if you are told by the preoperative clinic that it is okay for you to eat or drink if you are a later arrival, **Dr. Yousif's policy is nothing to eat or drink, as you may be cancelled upon arrival if you do.** If you are on high blood pressure medication, you may take this with a sip of water when you get up in the morning. Please do not take any aspirin, anti-inflammatories, or any herbal supplements for 7 days prior to surgery. You may take Tylenol or your regular prescribed pain medication if this is your normal routine (except above stated aspirin/anti-inflammatories).

Our office policy is that we provide narcotics for up to 4 weeks after surgery as necessary. After that if you still require narcotic use, other arrangements may be necessary.

CONTROLLING SWELLING AFTER SURGERY and SHOWERING

After surgery you must elevate and ice your knee to reduce swelling. Please ice over the dressing. There is no time limit in regards to icing when ice is applied over the post-operative dressing. The dressing is removed at your first physical therapy appointment. Once the dressing is removed, ice may then be applied for 20 minutes every 2 hours with a thin towel between the ice and your skin. Poorly controlled swelling delays the recovery of motion and strength. The sooner the swelling resolves, the sooner you will have less pain and better function. Swelling can be reduced by keeping your leg elevated when not up and about. Swelling is also controlled with the use of an Ace wrap. When wrapping your knee to control swelling, start the wrap well below the knee and wrap upward toward your mid-thigh. You may discontinue the Ace wrap when the swelling has resolved.

Incision care: Please keep your incision dry and do not apply any ointments or creams. The sutures/steri-strips will be removed at your first post-operative physician appointment.

Showering: Your incision needs to stay dry for 7-10 days. Specific instructions for showering should be reviewed to promote your safety at home.

Information about Anterior Cruciate Ligament (ACL) Reconstruction

ACL surgery refers to a surgical procedure to effectively replace the damaged ligament. When ACLs tear, they cannot be repaired. This means the tissue is no longer competent and needs to be replaced or reconstructed.

The ACL is the primary stabilizer of the knee for front-back motions and without an ACL, the knee tends to shift or 'give out' when the athlete attempts to change direction, land from a jump, or stop quickly. These subsequent episodes of giving way have a very high incidence of causing more damage to the meniscus pads and the lining cartilage on the end of the bones. As a result, ACL reconstruction is often performed for those individuals who either experience giving way with the normal tasks of daily living and/or those athletes who desire returning to high demand, agility type activities.

The tissue used to reconstruct the ACL can come from many places and different surgeons may have different preferences on what they use. In general terms, the tissue used to replace the ACL is called the graft. The graft can be harvested from the patient (autograft) or can be a donated piece of tissue (allograft) from someone who has passed away and agreed to donate his or her body to others in need.

The source of your graft is an important decision you must make. Dr. Yousif has experience with most all graft options and is happy to discuss his opinion on graft selection. All graft types have inherent risks and there are certain specific situations that might preclude the use of one graft type or the other. Review your specific case if you have questions.

Autograft harvest can be the most uncomfortable part of the surgery, as it requires an incision across the front of the knee. This incision has inherent risks associated that some patients may experience. Graft site complications can include numbness from the stretch or cutting of a small sensory skin nerve

during the dissection to harvest the tendon, fracture of patella (knee cap) as a wedge of bone is taken from both the patella and the tibia with the tendon, and a condition referred to as anterior knee pain. This can result in persistent soreness at the graft harvest site that can last for up to 2 years and sometimes may be a permanent residual symptom.

The surgery performed with the allograft (donated tissue) tends to be a shorter, less invasive procedure, and patients tend to be more comfortable through the first 2-3 months of their rehabilitation. This is because the patellar tendon is not harvested from the patient.

Risks with allografts are present as well and many patients ask about the harvested tissue. The FDA and American Association of Tissue Banks have very strict criteria for a patient to be a donor. Many specific tests have to be done and a sterilization process completed before tissue is ever released for use. Allografts are used commonly for procedures in orthopaedics, neurosurgery, plastic surgery, and dental procedures where bone, ligament, tendon, cartilage, or skin must be replaced. These grafts are structural grafts that allow the patient's own blood vessels and subsequently their cells to grow into the graft and ultimately in the case of the ACL reconstruction, become the new ligament.

This is not at all like receiving a kidney or liver, which are live vascularized grafts. The ACL allograft is scaffold for your cells to grow into. Even the autograft is considered "dead" tissue, as it has no blood supply to it when harvested. There is no need to take any rejection medication or any antibiotics other than what are prescribed routinely for arthroscopic procedures.

Regardless of the graft type used, as the patient's blood vessels and cells grow into the graft, the process makes the graft weaker before it gets stronger. This occurs over the first 8-12 weeks and is the reason why we ask patients to wear a protective brace. Studies show that the graft incorporation and revascularization is comparable by around 6 months post-operatively. I do not alter the rehabilitation protocol based on the graft type used, both groups follow the same rehab program and progression

Braces

We will ask you to use 2 braces. The first is called a post-op brace and is larger and bulkier. It maintains the knee locked out straight. As the therapist and physician deem appropriate, they will gradually increase the range of motion for daytime activity. At your first post-operative visit, which is usually between 2-4 weeks, the functional brace is applied. You will wear the functional brace during the day and almost full time until about 10 weeks after surgery.

The post-op brace is worn at nighttime while sleeping locked out straight for the first 6 weeks or when your therapist determines your extension has been restored to symmetric with the other leg, which is usually within the first 3-4 weeks. Once your extension is symmetric, nighttime bracing can be discontinued.

After 10 weeks, you will not need to wear a brace until you begin the function/agility phase of the rehabilitation. You may choose to wear your brace if you are in large crowds, on uneven terrain, or feel more comfortable or confident in it. The functional/agility phase of your rehab program begins typically around the 5 month mark from surgery and this last phase can take 4-6 weeks to progress through before you are "cleared" for return to play at higher demand activities that require agility, cutting, pivoting, and landing.