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Revision Anterior Cruciate Ligament Reconstructive Surgery

Indications for Surgery

- Patients who failed a previous anterior cruciate ligament (ACL) reconstruction and regularly perform sports that require pivoting, cutting, and jumping and landing
- Patients with a failed previous ACL reconstruction and recurrent giving way or knee instability, despite an adequate rehabilitation program
- Patients with a failed ACL reconstruction and a repairable meniscus or articular cartilage tear
- Patients with a failed ACL reconstruction and other ligament injuries in the same knee

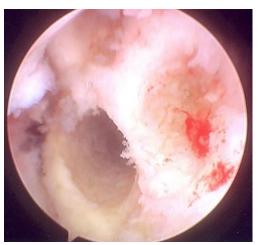
Dr. Chudik specializes in fixing failed ACL surgeries from near and far. ACL revision surgery is complicated and the goals of the surgery include: address the reason for failure, correct technical errors, properly reconstruct the torn ligament, repair any other damaged structures including other ligaments, meniscus, cartilage, or bone and restore function and stability to the knee.



MRI image of failed ACL surgery and poor tunnel placement



CT scan shows bone loss from failed Arthroscopic photo shows new, **ACL** surgery



accurate ACL tunnel adjacent to two previous erroneously placed tunnels

Contraindications to Surgery

- For individuals who do not perform sports requiring frequent pivoting, cutting, jumping and landing, surgery may not always be the best solution.
- Persons who demonstrate an inability or unwillingness to complete the necessary postoperative rehabilitation program should not have surgery.



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- Infection of the knee, current or previous, is a concern, but not an absolute contraindication.
- Persons with severe knee arthritis and damaged cartilage.

Potential Surgical Risks and Complications

- Infection
- Nerve injury (numbness) in the skin around the knee. It is not uncommon to have some small area of numbness, temporary or permanent, around the incisions.
- A post-operative infection can require staged surgeries and the ACL graft to be removed to treat the infection.
- Re-rupture or stretching of the reconstructed ligament, causing recurrent instability (more common with allografts).
- Knee stiffness (loss of knee motion) requiring prolonged rehabilitation or repeat surgery.
- Rupture of the patellar tendon, patellar fracture, patellofemoral arthritis, kneeling pain if previous bone-patellar tendon bone ACL graft taken.
- Pain from the fixation device used to hold the graft (rare).
- Clot in the veins of the calf or thigh (deep venous thrombosis, phlebitis) that may break off in the bloodstream and go to the lungs (pulmonary embolus) (rare).

Hospitalization and Anesthesia

- General anesthetic, femoral block (See Your Surgical Experience booklet)
- Outpatient surgery (you go home the same day)

General Surgical Technique

Dr. Chudik performs revision ACL surgery with the assistance of an arthroscope (small camera that lets him look inside the knee through small incisions). The surgery usually is performed as an outpatient procedure (you go home the same day) with general anesthesia and a nerve block (numbing medicine injected around the nerves of the leg). The failed ACL is replaced by a new graft. Each graft has its own risks and benefits. Prior to surgery, Dr. Chudik discusses the type of graft that is best for you. In the revision setting, Dr. Chudik still prefers to use your own autologous tissue but sometimes must resort to using allografts because previous grafts have already been taken and the allograft can provide a wide range of necessary sizes.

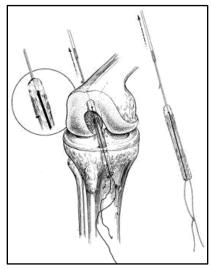
During the surgery, the other ligaments, meniscus, cartilage, and bone of the knee are evaluated and treated appropriately. Arthroscopically, the failed ACL graft is removed, bone tunnels are bone grafted and re-drilled in the tibia (shinbone) and femur (thighbone), and the graft is placed anatomically where the normal ACL used to be. Many ACL surgeries fail because





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of previous technical error. The graft is held in position until it heals with special fixation devices that usually do not need to be removed. Some ACL revisions need to be performed in staged procedures to achieve all of the goals. Dr. Chudik invented novel instruments and techniques to perform revision ACL surgeries that typically require multiple surgeries (each with their own separate rehabilitation time) in one single procedure. This shortens the recovery time to that of a primary ACL surgery (less than six months rather than more than one year).



Schematic of ACL reconstruction



Arthroscopic photo of ACL reconstruction

Post-Operative Course

- Crutches and partial weight bearing for approximately four weeks for an isolated ACL reconstruction
- A post-op knee brace for only 24 hours if a regional femoral block was used or six weeks if your meniscus is repaired or if another ligament also had to be repaired/reconstructed
- Keep the wound clean and dry for the first 10 to 14 days after surgery. Showering lightly after two weeks, but wounds cannot be submerged under water for three weeks
- Driving after six weeks if right lower extremity is involved
- Return to school/sedentary work in less than one week as long as the extremity can be elevated
- Physical therapy to restore motion, strength, and proprioception (balance) for up to four to six months
- After the knee is fully rehabilitated, **Dr. Chudik's ACL Functional Capacity Evaluation** is performed to determine that the knee is fully rehabilitated and, more importantly, that any errors in movement patterns (known to put patients at risk for injuring their ACL reconstruction or their other knee) are corrected and the patient can return to activities safely





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Return to Activity

- Return to walking and regular daily activities once off crutches (about four to six weeks after surgery)
- Return to running about three months post-op
- Return to sports at four to six months post-op

Preoperative instructions

- Discontinue birth control pills
- Stop blood thinners such as aspirin, Coumadin[®], Lovenox[®], Xarelto[®] according to the prescribing doctor's directions
- Stop anti-inflammatory medicines such as ibuprofen, Advil[®], Motrin[®], Naprosyn[®], Alleve[®], etc.)
- Stop nutritional supplements and drinks like Vitamin C, ginseng, ginkgo biloba, etc.
- Stop smoking for surgery and during the first six weeks postoperatively to allow proper tissue healing

Do not eat or drink anything from midnight the evening before surgery

Scheduling Surgery

Call Dr. Chudik's surgery scheduler at 630-324-0402, or email contactus@chudikmd.com to:

- Schedule the date and location of surgery
- Schedule an appointment with Dr. Chudik's physician assistant to complete pre-operative surgical education and other requirements
- Schedule a post-operative appointment with Dr. Chudik's team to remove sutures and review post-op instructions

Notify My Office if Symptoms Worsen



