DR. WILLIAM PENNINGTON
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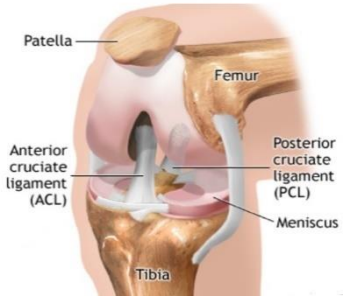
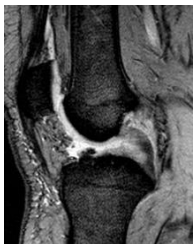
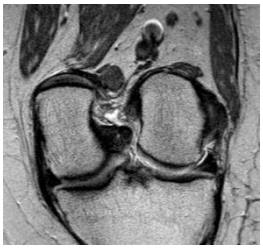
ACL Reconstruction

Knee Anatomy: The anterior cruciate ligament (ACL) is one of the major ligaments of the knee. It connects the thigh bone (femur) to the shin bone (tibia) and provides stability during cutting, pivoting, and twisting movements. A torn ACL can lead to instability, pain, and loss of function - especially in athletes and active individuals.

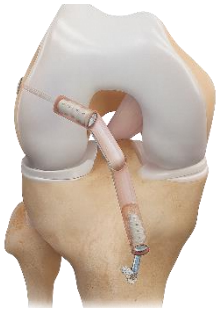






Why Surgery? ACL reconstruction is usually recommended for patients who have ACL tears and experience knee instability, want to return to pivoting sports, or have associated injuries such as meniscus or cartilage tears. Ignoring these tears can lead to significant dysfunction and further damage to the knee leading to early arthritis.

The Surgery: Reconstruction of the ACL takes approximately 60 minutes and involves replacing the damaged ligament with new tissue. This new tissue can be taken from your surgical leg (autograft) or from a donor (allograft). An incision is made below the kneecap or towards the inside of your tibia. This allows Dr. Pennington to locate and harvest your tendons (for autograft reconstruction) and tunnel/anchor the graft to your tibia. The rest of the surgery is performed arthroscopically, using a small camera and tools to manage any other the damage of the knee joint and reconstruct your ACL.



Scan this QR for a video animation of our typical surgical technique for ACL reconstruction

Early Post-Operative Course: After surgery, you can expect your knee to be wrapped in sterile dressings and covered by a polar care ice machine. Ice and elevate as much as possible early on to improve swelling and pain. Some bruising of the lower leg is to be expected. You can put weight onto the surgical side as your pain allows, but expect to be on crutches for 1-2 weeks. You may remove your dressings and shower 2 days after surgery. We'll see you about 1 week after surgery for a post-op visit to evaluate your knee, assess motion and PT progress, and remove surgical sutures/staples.

Restrictions: Do NOT pivot or twist your knee until your graft is fully healed, which takes approximately 6 months. You will be doing plenty of in-line activities including walking, jogging, and running prior to that point as directed by your therapist.

Physical Therapy: You'll start therapy before surgery to improve your surgical outcome, and resume it within the first few days of surgery. PT should be arranged before your surgery to assure these visits are available and confirmed. Early therapy is crucial for healing, muscle restoration, range of motion, and prevention of complications including scar. Therapy is usually 2–3 times per week initially, tapering down over 6 months.

Motion: Early controlled motion is important to prevent stiffness. Patients begin gentle range-of-motion exercises within the first 1-2 days after surgery, with a goal of regaining full extension quickly. A CPM (continuous passive motion) machine will be ordered and delivered to you which helps move your knee for you. The goal is to achieve at least 90 degrees of flexion within the first 1–2 weeks. Plan to use the CPM 3–4 hours per day in 1-hour increments. Unless otherwise directed, start your CPM machine the day after surgery. You'll be using this for a total of 4–6 weeks.

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Weight Bearing: You can bear weight as tolerated with the use of crutches after surgery. Expect to use crutches for 1-2 weeks until you can safely walk and move without risk of fall.

Brace: We rarely use knee braces right after surgery. We want you to be able to move and flex your knee freely to reduce scar formation. We also want your quad muscles to develop quickly in PT as this serves as your natural knee brace in life. As you get closer to return to sports (6 months) we will then order you a knee brace for extra protection of the reconstruction upon return to activity. We usually recommend using this for the first 3-6 months of activity and then as needed thereafter.

Pain Management: Anesthesia will perform a nerve block prior to surgery which significantly reduces the immediate surgical pain for up to 24 hours. We generally also use a combination of medicines to help with pain. The pain medicine (typically oxycodone) is a narcotic drug that helps with the initial surgical pain and should be weaned off as soon as tolerable. An anti-inflammatory medicine (meloxicam) is often added to help with pain and inflammation. This should be taken once per day and can be discontinued when the pain levels stabilize. Aspirin may also be prescribed to help prevent blood clots. The polar ice pack is also used as needed to help decrease the inflammation and pain – especially during the first few days.

Driving: You may drive once you are off your narcotic pain medicine and feel safe to operate the vehicle. For right knee surgery, this may take longer due to braking demands.

DVT Prevention: Deep Venous Thrombosis is a risk of any surgery. If you are prescribed aspirin, take this for the full 6 weeks. Compression socks and devices should be used for the first week and can be discontinued after that.

Long Term Expectations: We expect patients to ease back to many in-line gentle activities including jogging, swimming, and light gym work within 3 months of surgery. Running is often resumed around 4 months. Full contact and pivoting sports require 6-9 months for safe return.

Ortho Lazer is a recommended, FDA approved treatment that expedites healing and decreases pain, inflammation, and infection risks. It reduces the need for postoperative narcotics. It also reduces scar formation which is the number one risk of ACL knee surgery. It is a series of 6 (10 minute) treatment sessions available at Franklin and Brookfield facilities. Although optional, this treatment has been extremely effective in our ACL reconstruction patients. The 6 visits cost $420 in total

ORTHO LAZER
Orthopedic Laser Center

For assistance arranging Ortho Lazer treatment, please contact our surgical coordinator Sheila at 414-643-4002 or ssullivan@theorthoinstitute.com. She can assist in coordinating surgical and Lazer scheduling as we typically begin these treatments within a couple days of surgery.

Thanks for choosing Dr. Pennington to care for your knee.
He and his team are dedicated to helping you improve your pain, function, and quality of life.