



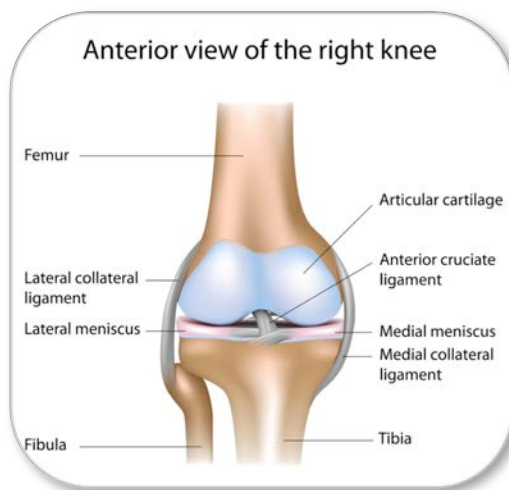
Understanding ACL Reconstruction Surgery

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Our goal at The Orthopedic Institute of Wisconsin is to provide high quality care, both non-surgical and surgical. This approach allows our patients to regain lost function and experience pain relief that will hopefully result in the improvement of their quality of life. If you have any additional questions, please call: (414) 643-8800

Understanding Knee Anatomy

The knee joint joins the thigh-bone (femur) to the shin bone (tibia). Tendons connect the bones to the muscles in the leg that move the knee joint. Ligaments in the knee join bones and provide stability. The anterior cruciate ligament (ACL) is a dense bundle of connective tissue at the center of the knee, which runs from the femur to the tibia. Its function is to limit rotation and to keep the shin-bone from sliding out in front of the thigh bone.



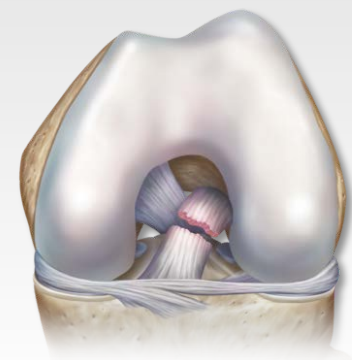
Why Surgery?

Patients presenting with an ACL tear often note a “popping” sound at the time of injury. The knee usually swells within 6 hours of the injury and pain is felt, especially when weight bearing. Those patients who are expecting to return to high-level athletics and those who have experienced knee instability often need to undergo surgery to reconstruct the torn ACL.

Causes of ACL Injury

The majority of ACL injuries occur due to some kind of trauma, often while participating in athletic activities such as basketball, football, soccer, and skiing.

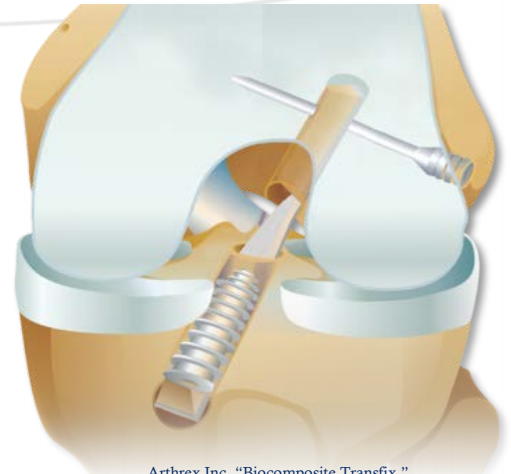
- Getting hit very hard on the side of the knee
- Overextending the knee joint
- Quickly stopping forward motion
- Changing directions quickly
- Landing from a jump



Arthrex Inc. “ACL Tear.”
<http://www.arthrex.com/knee/acl-tear>

The Surgery

Reconstruction of the ACL will take, on average, 45-60 minutes and involves replacing the damaged ligament with human tissue. The new tissue can be taken from the patient (autograft) or from a donor (allograft). In the case of an autograft, an incision is made below the kneecap, towards the inside of the leg. This allows Dr. Pennington to locate the required hamstring tendon and remove it. The rest of the surgery is performed arthroscopically, through the use of a small camera, in an effort to assess the damage of the knee joint. Holes are drilled in the tibia and in the outer edge of the femur. This allows for the graft to be held in place within each bone. In the tibia, a biocomposite screw is used and in the femur, a biocomposite cross pin is used.



Arthrex Inc. "Biocomposite Transfix."
<http://www.arthrex.com/knee/biocomposite-transfix>

Typical Schedule of Follow-Up Visits

Five-to-ten day assessment

- Staples removed
- Pain level check
- CPM machine use assessed
- Continue with physical therapy

1-month assessment

- Range of motion check
- Quad strength check

2-3 month assessment

- Range of motion check
- Quad strength check

4-6 month assessment

- Hopeful return to sport



Arthrex Inc. "ACL Reconstruction."
<http://www.arthrex.com/knee/acl-reconstruction>

Post-Operative Expectations

After surgery, you can expect your knee to be wrapped in a polar care ice machine and a muscle stimulation machine. Your incision site will be covered in a sterile dressing; keep your incision site clean and dry. Some bruising of the lower leg is to be expected. Patients can expect to be on crutches for 1-2 weeks, or until it is not painful to walk without them. A continuous passive motion (CPM) machine will be provided to you following your surgery. You may drive once you are no longer taking prescription pain medication and when you have been cleared by your physical therapist. Patients involved in athletics can expect a return to non-contact and non-cutting activities at 8-12 weeks and a return to full athletic activities at 4-6 months.

Physical Therapy

Physical therapy begins soon after surgery and focuses on pain relief and passive motion, followed by active motion and strengthening of the knee and leg. Those patients who are diligent about physical therapy and rehabilitation can expect the best post-op results and the earliest return to sport.



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