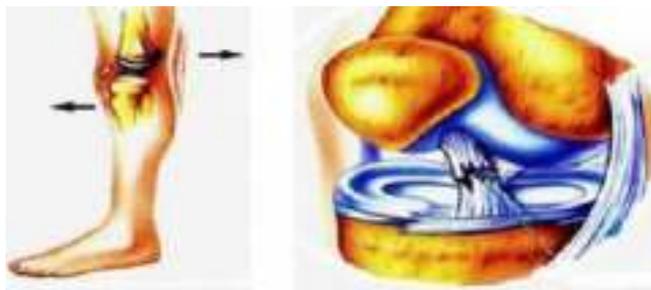


## ACL Tear

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The Anterior Cruciate Ligament or ACL is a ligament that connects the femur (thighbone) to the tibia (shinbone). It is located in the center of the knee. The ACL provides stability and keeps the tibia from moving too far forward relative to the femur. Most ACL tears are the result of a twisting injury or a rapid forward translation of the tibia as shown below. After an ACL injury, the tibia shifts forward with activity causes the knee to buckle more easily. This instability prevents most athletes from returning to sports, puts other structures in the knee at risk and, with higher levels of laxity, and even causes instability of activities of daily living. It is the instability and the risk of increased damage to the cartilage that prompts patients to seek repair of the knee.



### Treatment: ACL Reconstruction



Surgery to reconstruct the ACL ligament can be done arthroscopically through small incisions and is done on an out-patient basis (avoiding a hospital stay and allowing the patient to recover in the comfort of their own home.) It requires placing a tendon graft obtained from your own patella tendon, hamstrings or donor graft. There are advantages of each graft type and pending your particular situation your surgeon will pick the best graft for your knee. In the operating room, Dr. Reznik first examines the knee with the KT1000 knee arthrometer. This device measures the exact level of stability of both the normal and injured knees. The measurements help confirm the diagnosis and a sterile version used at the end of the procedure confirms the stability after the repair. Once the diagnosis is confirmed by the exam under anesthesia, the knee is then evaluated with the arthroscope. Dr. Reznik checks each compartment of the knee

for other related problems like cartilage tears. These are repaired and then attention is turned back the ACL injury. The torn fragments are cleared from the knee. The ligament's natural position in the knee is identified and tunnels are then drilled into the tibia, and the femur. The graft is guided through the tunnels and anchored in place with dissolving pins and/or titanium screws. Once the graft is in place the small incisions are closed.



Figure 1 ACL tear



Figure 2 ACL guide  
in place

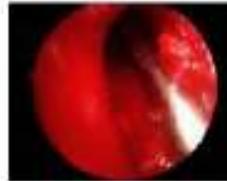


Figure 3 ACL Tunnel



Figure 4 ACL graft  
in place

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