

ACL Repair: Autograft vs. Allograft



The **anterior cruciate ligament** (ACL) is the main ligament that stabilizes the knee to anterior displacement. If you have torn your ACL and are scheduled for reconstructive surgery, you may have been told that your surgeon could use either an autograft or an allograft.

An **autograft** is a piece of tissue removed from elsewhere in your body and used to repair the ACL. The advantages of autografts include the following:

- It's your own tissue. There is no chance of getting a disease from the graft.
 - Your own tissue is always available. There are no problems of supply and demand.
- Your own tissue usually incorporates into the knee better in the long term.

Autografts also have disadvantages. The surgery takes longer since there are two portions of the operation: obtaining the graft tissue and then repairing the ACL. A limited amount of tissue can be removed for grafting without causing secondary damage, and the chance of surgical complications increases because of the multiple incisions.

An **allograft** is a piece of tissue that has been donated by a tissue donor. The advantages of allografts include the following:

- You undergo a shorter operation.
- You have less initial pain and can get back to daily activities sooner.
- A larger amount of tendon is available for the surgeon to work with.

Because allografts are cleaned and sterilized using radiation or other processes, disease transmission is extremely low—fewer than one out of one million procedures. However, allograft tendons may be **less sturdy** than autograft tendons—they usually come from older donors, and the sterilization process may weaken the tissue. And the demand for allograft tendons usually exceeds the supply.

Either autografts or allografts can be used in successful ACL reconstruction. People who have ACL surgery using autografts have more pain the first two weeks after the operation and take longer to get back to their daily activities when compared with those who have ACL surgery using allografts. Whichever technique you choose, a physical therapist will work with you to help you get back on your feet.