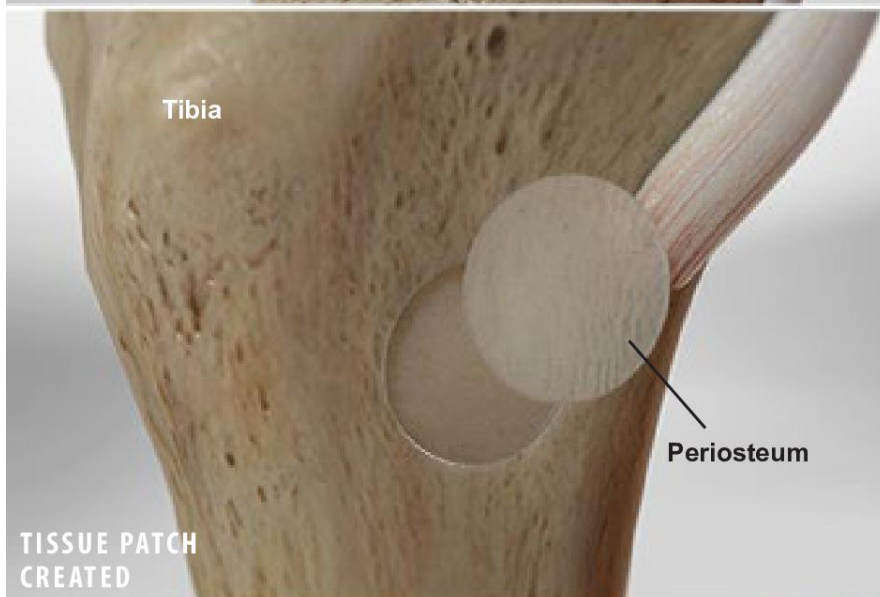
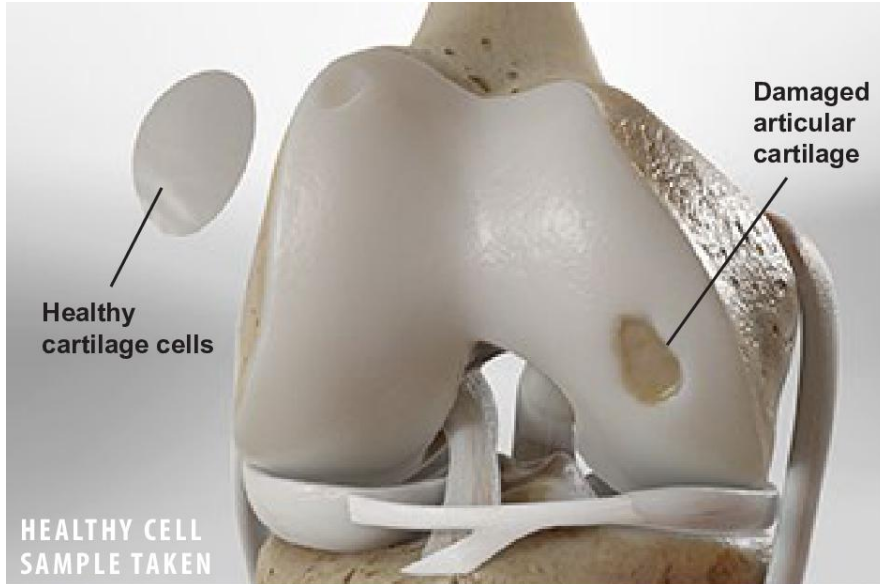




Autologous Chondrocyte Implantation (ACI)



Overview

This repairs your knee's damaged articular cartilage. That's the cartilage covering and protecting the ends of your bones. Repairing it helps you stay active. This surgery is done with two procedures. They are performed weeks apart.

Harvesting

The first procedure is for collecting some of your healthy cartilage tissue. To begin, you are put to sleep. One or more small openings are made in your knee. One is for an arthroscope. That's a tube-like device with a video camera and light. The surgeon uses the arthroscope and tiny instruments to take a small sample of healthy cartilage cells from the joint.

Growing the cells

The cells are sent to a laboratory. They are used to grow even more cartilage cells. This takes several weeks.

Implantation

After the new cells are sent to your surgeon, you come back for the second procedure. You are put to sleep. An incision is made in your knee. The surgeon removes any loose or damaged cartilage from your joint. Then, the surgeon takes a small patch of healthy tissue called "periosteum" from the surface of your tibia. This is secured over the bad spot in your cartilage. The new cartilage cells are then injected beneath this patch. They will grow and bond with your knee to form a new layer of cartilage.

End of procedure

After the surgery, you'll be watched in a recovery room as you wake up. Your surgeon will tell you when you can go home. Follow your surgeon's advice for a safe recovery.