



Total Knee Replacement (Encore 3DKnee™)

KNEE BEFORE IMPLANTS



KNEE AFTER IMPLANTS



Overview

Total knee surgery removes the damaged and painful areas of the femur (the thigh bone) and tibia (the lower leg bone). These areas are then replaced with specially-designed metal and polyethylene plastic parts.

Reshaping the Femur

The damaged portions of the femur bone and cartilage are cut away. The end of the femur is reshaped to allow a metal femoral component to fit in place.

Attaching the Femoral Component

The metal component is attached to the end of the femur with bone cement. Alternatively, the component can have a special coating that allows it to be pressed into place without cement.

Reshaping the Tibia

The damaged portion of the tibia bone and cartilage are cut away. The end of the tibia is reshaped to receive the metal tibial component.

Implanting the Tibial Component

The metal tibia component is secured to the end of the tibia bone with bone cement.

Attaching the Insert

A polyethylene insert is attached to the metal tibial component. The insert will support the body's weight and allow the femur to glide over the tibia.

Forming the New Joint

The tibia, with its new polyethylene surface, and the femur, with its new metal component, are put together to form a new knee joint.

Preparing the Knee Cap

To make sure the patella (the knee cap) glides smoothly over the new artificial knee, its rear surface is prepared. A polyethylene component is cemented into place on the back of the patella.

Testing the Joint

The new parts of the knee joint are tested by flexing and extending the knee.