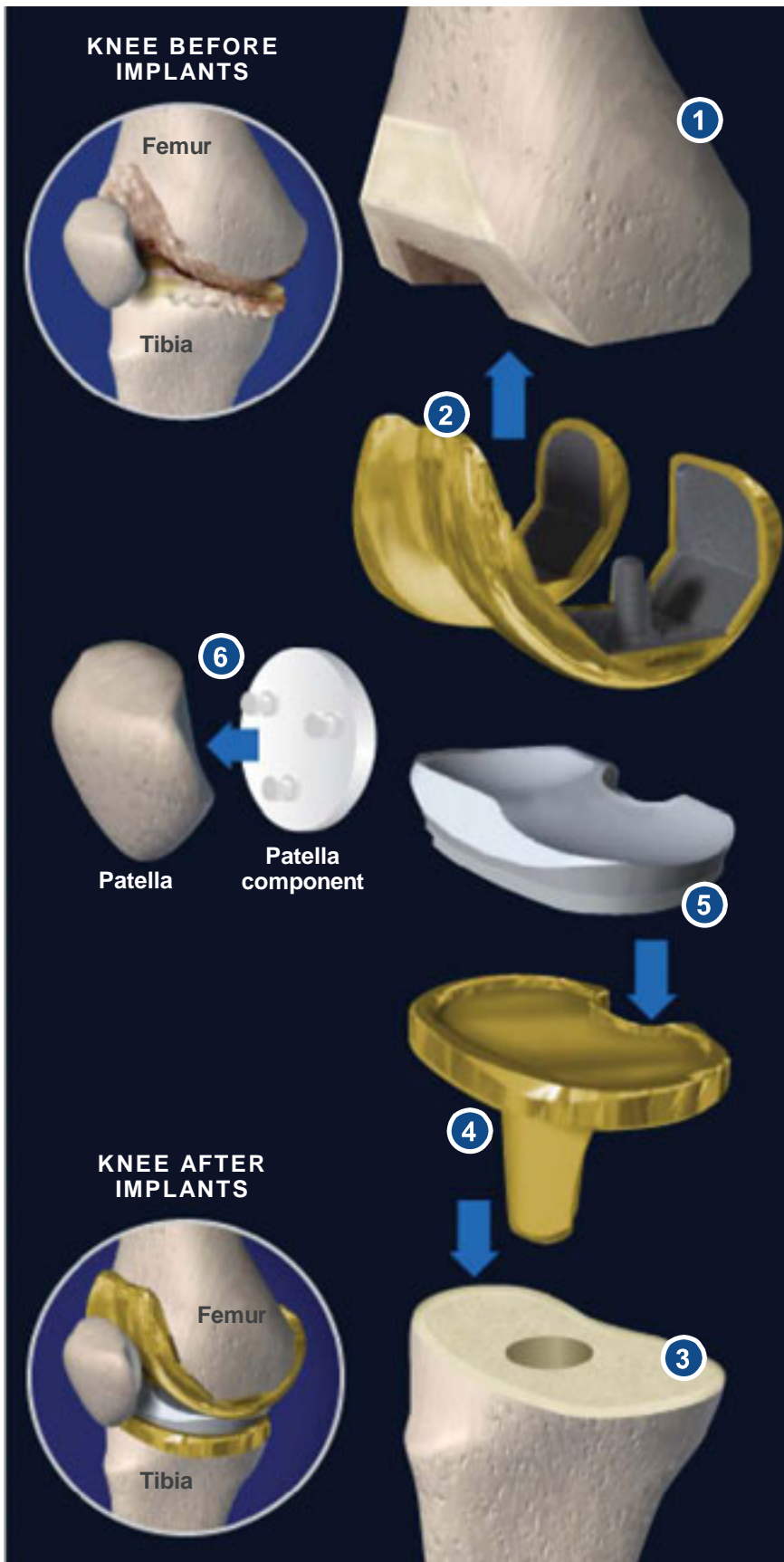


Total Knee Replacement (Uncemented)



Overview

This surgical procedure removes the damaged and painful areas of the femur and tibia inside the knee joint. These areas are then replaced with specially-designed metal and polyethylene plastic parts.

Preparation

The patient is positioned so the knee can be bent comfortably, and the area is cleaned and sterilized. An IV with general anesthesia is administered.

Accessing the Knee

An incision is made along the side of the patella to allow the surgeon access to the knee joint. The joint is examined.

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. The implant is made of specialized metal that approximates the structure of bone. This allows the bone to grow into the implant and creating a strong bond without the use of bone cement.

Reshaping the Tibia

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

Implanting the Tibial Component

The metal tibia component is placed into the tibia. The implant is made of the same specialized metal as the femur implant, so no bone cement is required.

Total Knee Replacement (Uncemented)



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

Preparing the Patella

To make sure the patella, or knee cap, glides smoothly over the new artificial knee, its rear surface is prepared to receive a plastic component, which is inserted.

Testing the Joint

The incision is closed with sutures or surgical staple. A bandage is applied, and patients will receive physical therapy. Many patients may be able to put full weight on the leg within one to two days after the procedure.