Total Knee Replacement (TKR) - Animation

(0:02 - 0:20)

The knee consists of the tibia or shin bone, femur or thigh bone, and patella or kneecap. In knee arthritis, the cartilage on the end of the bones slowly wears away, causing pain and irritation, making daily activities difficult. Arthritis can affect all or just one area of the knee.

(0:21 - 1:02)

In this case, the entire knee is affected and a total knee replacement is performed. During the surgery, your doctor uses a series of guides to help remove the damaged bone and prepare the femur, ensuring proper implant size and alignment. Next, your doctor will prepare the tibia using a series of guides to ensure proper implant size and alignment.

(1:08 - 1:32)

The final tibia preparation is completed and a trial spacer is used to confirm knee stability. Next, your doctor prepares the patella to accept the implant. A trial implant is placed on the patella and the knee is checked for proper implant size and stability.

(1:32 - 2:25)

The trial implants are then removed and the surfaces are prepared for placement of the final implants. Your doctor applies bone cement on the backs of the tibia, femur, and patella implants for final fixation. This completes total knee replacement.