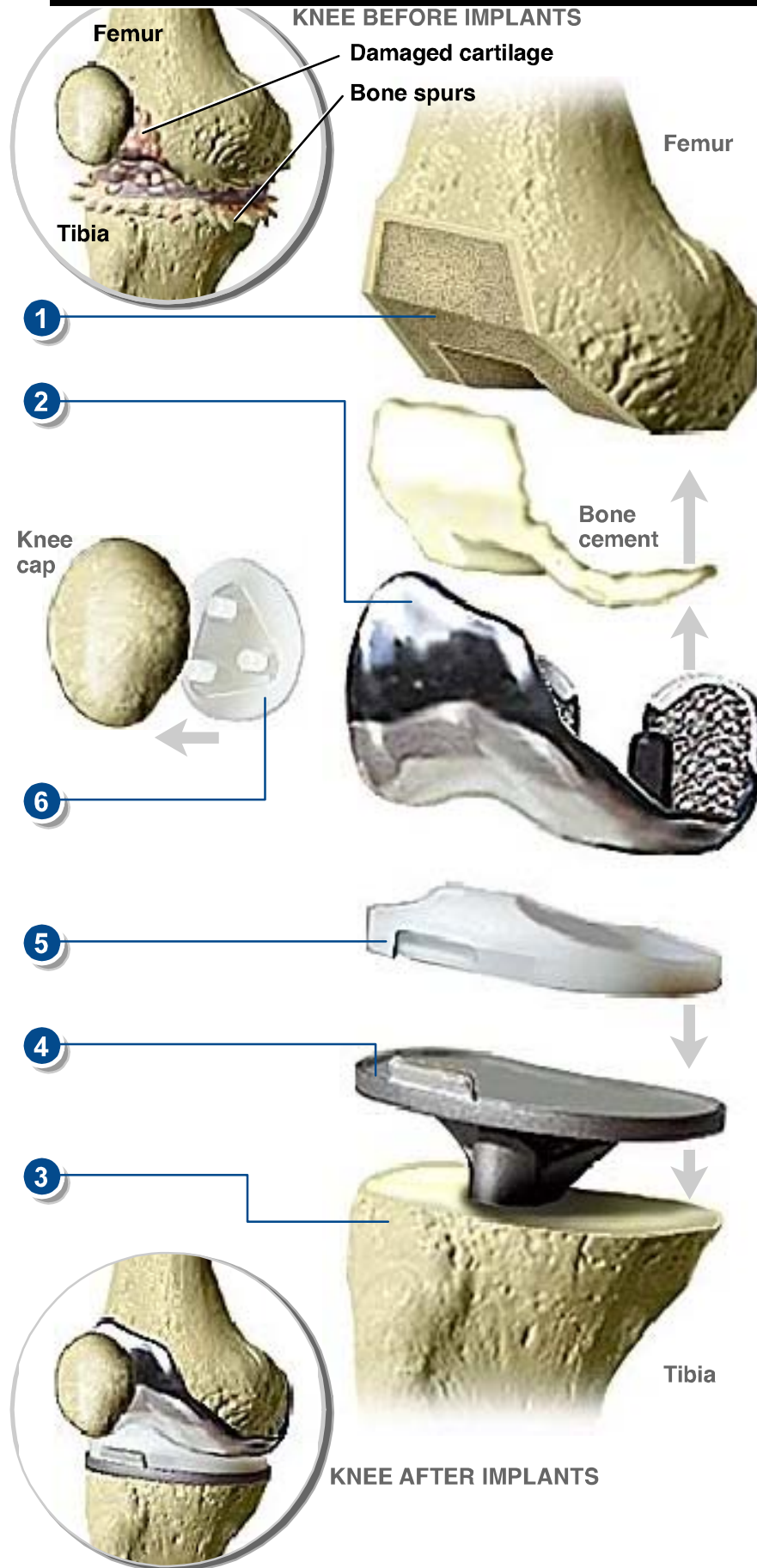


## TOTAL KNEE REPLACEMENT



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

### 1. Femur Reshaped

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

### 2. Metal Component Attached

A metal component is attached to the end of the femur using bone cement.

### 3. Tibia Reshaped

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.

### 4. Tibial Component Attached

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

### 5. Plastic Insert Attached

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.

### Components Joined

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

### 6. Patella Resurfaced

To make sure the patella (the knee cap) glides smoothly over the new artificial knee, its rear surface is prepared to receive a polyethylene plastic component. The component is cemented into place.

### End of Procedure

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