

# HEALTH IN OUR HANDS!

The Arkansas State University Wellness Program Newsletter  
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## Skin Cancer

# Knee Replacement Surgery

## Overview

Knee replacement surgery — also known as knee arthroplasty (ARTH-row-plas-tee) — can help relieve pain and restore function in severely diseased knee joints. Knee replacement joints attempt to replicate your knee's natural ability to roll and glide as it bends. During knee replacement, a surgeon cuts away damaged bone and cartilage from your thighbone, shinbone and kneecap and replaces it with an artificial joint made of metal alloys, high-grade plastics and polymers.

## Why surgery?

You and your doctor may consider knee replacement surgery if you have a stiff, painful knee that makes it difficult to perform even the simplest of activities, and other treatments are no longer working. This surgery is generally reserved for people over age 50 who have severe osteoarthritis. The

most common reason for knee replacement surgery is to repair joint damage caused by osteoarthritis or rheumatoid arthritis. People who need knee replacement surgery usually have problems walking, climbing stairs, and getting in and out of chairs. They may also experience moderate or severe knee pain at rest.

## How You Can Prepare

Getting in the best physical shape possible before surgery can lessen the chance for complications and shorten your recovery time.

- If you smoke, cut down or quit. Smoking affects blood circulation, delays healing and slows recovery.
- Eat a nutritious, well-balanced diet. If you are overweight, there will be more stress placed on your new joint. In some cases, your doctor may recommend a weight loss program.

- Ask your doctor about exercises you can do before surgery. If you are having a hip or knee replacement, strengthening your upper body will make it easier to use crutches or a walker after surgery. Ask about the exercises that will be prescribed after surgery. If you become familiar with the exercises now, you will be better able to perform them correctly after surgery.

Make advance arrangements for transportation home from the hospital and help with everyday tasks such as cooking, bathing and doing laundry. If you live alone, your surgeon's staff can suggest a temporary caretaker.

## During Surgery

Once you are under general anesthesia (meaning you are temporarily put to sleep) or spinal/epidural anesthesia (numb below the waist), an 8- to 12-inch cut is made in the front of the knee. The

damaged part of the joint is removed from the surface of the bones, and the surfaces are then shaped to hold a metal or plastic artificial joint. The artificial joint is attached to the thigh bone, shin and knee cap either with cement or a special material. When fit together, the attached artificial parts form the joint, relying on the surrounding muscles and ligaments for support and function.

### **Physical Therapy**

The average hospital stay after knee joint replacement is usually three to five days. The day after surgery, a physical therapist shows you how to exercise your new knee to increase your range of motion and increase the healing process. After surgery, you are usually sent home or to a rehabilitation facility. If you are sent to a facility, the average rehabilitation stay is approximately seven to ten days. If you are sent directly home, your doctor will usually have a physical therapist come to treat you at home. Your doctor also may have you go to an outpatient physical therapy facility as the final stage of the rehabilitation process. Outpatient therapy may last from one to two months, depending on your progress. Your physical activity program needs to include:

- A graduated walking program — first indoors, then outdoors — to

gradually increase your mobility

- Slowly resuming other normal household activities, including walking up and down stairs
- Knee-strengthening exercises you learned from the hospital physical therapist, performed several times a day

### **Precautions**

After knee replacement surgery, you should not

- Pivot or twist on the involved leg for at least six weeks. Kneeling and squatting also should be avoided soon after surgery
- When lying in bed, you should keep the involved knee as straight as possible

During the first few weeks after surgery, you're more likely to experience a good recovery if you follow all of your surgeon's instructions concerning wound care, diet and exercise. Remember, not following the given precautions could result in the dislocation of your newly replaced joint.

### **Lasting Effects**

When joint replacement procedures were first performed in the early 1970s, it was thought that the average artificial joint would last approximately 10 years. We now know that about 85%

of the joint implants will last 20 years or more. Improvements in surgical technique and artificial joint materials should make these artificial joints last even longer.

### **References**

- <http://www.mayoclinic.org/te-sts-procedures/knee-replacement/basics/definition/prc-20019202>
- <http://orthoinfo.aaos.org/topic.cfm?topic=A00220>
- <http://www.webmd.com/osteoarthritis/guide/knee-replacement-surgery?page=2>

### **Other News:**

\*\*If you have any suggestions for newsletter topics, please contact Dean Susan Hanrahan at [hanrahan@astate.edu](mailto:hanrahan@astate.edu).

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The Arkansas State University Employee Wellness Newsletter is published monthly during the academic year by the College of Nursing and Health Professions. Health questions can be addressed to Dean Susan Hanrahan, Ph.D., ext. 3112 or [hanrahan@astate.edu](mailto:hanrahan@astate.edu). Produced by Kelsie Clark, graduate student in the College of Nursing and Health Professions, Physical Therapy Program.