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Advanced Knee Replacement

Minimally Invasive • Replacements Designed for Women • Partial Knee Replacement

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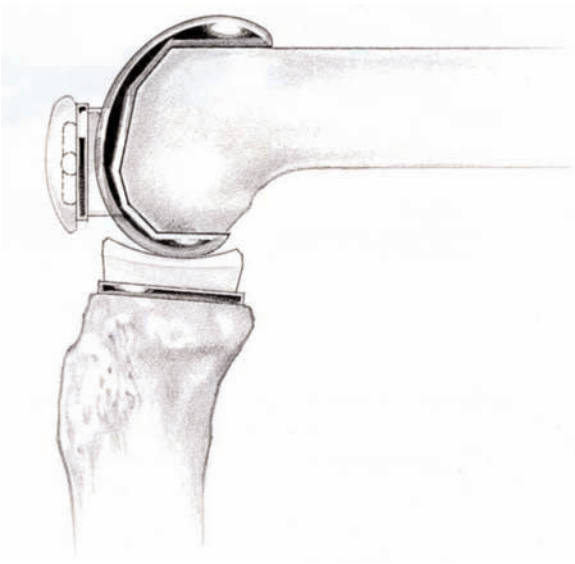
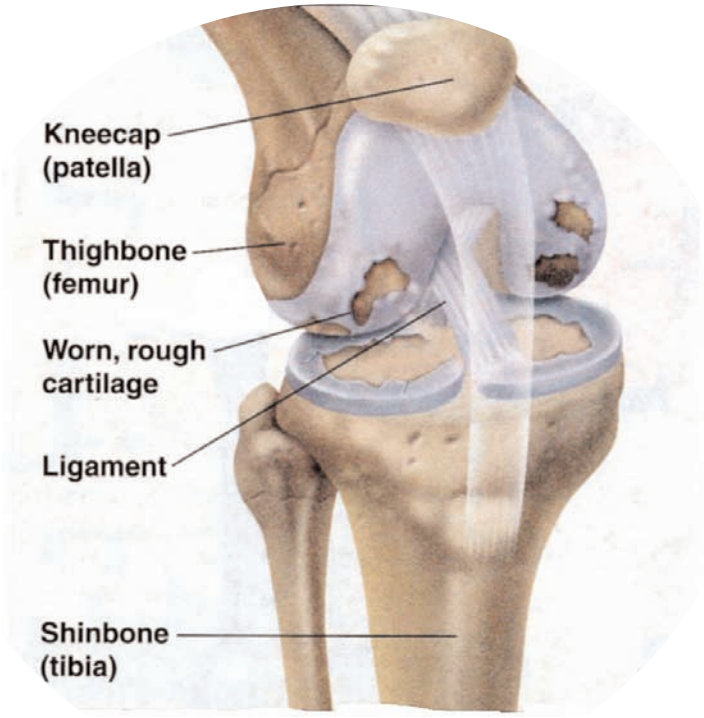


Patient Education Series

Knee Replacement: An Orthopedic Success Story



- In 2008, about 620,000 knee replacements were performed in the U.S. Within five years that figure may reach 1,000,000

- The vast majority of patients judge the operation to be very successful with the end result being: minimal to no knee pain, greatly improved ability to stand and walk, and noticeably better overall strength in the leg.

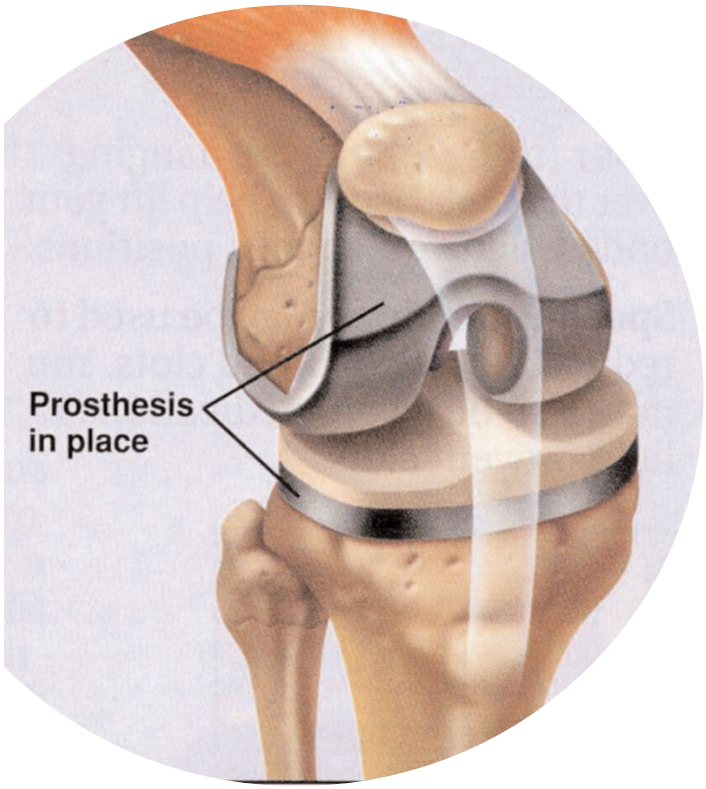
- The exciting story of knee replacement is that as the technology has advanced, knee replacements have continually improved - becoming more durable, less likely to wear out, with a better range of motion, better stability and feeling closer to a normal knee.

What Is Knee Replacement Surgery?

- The normal knee joint, like all joints in the body, should have nice smooth cartilage surfaces on the ends of the bones at the joint. This cartilage allows the joint to move freely without significant friction.

- The smooth cartilage can become worn away over the years, exacerbated by injuries or other joint conditions. When the cartilage is worn down to “bone-on-bone”, we call this osteoarthritis or osteoarthrosis.

- Knee replacement involves resurfacing the worn-out ends of the bone with a prosthetic metal surface, and placing a polyethylene (plastic) component to act as the new “bearing surface” of the joint.

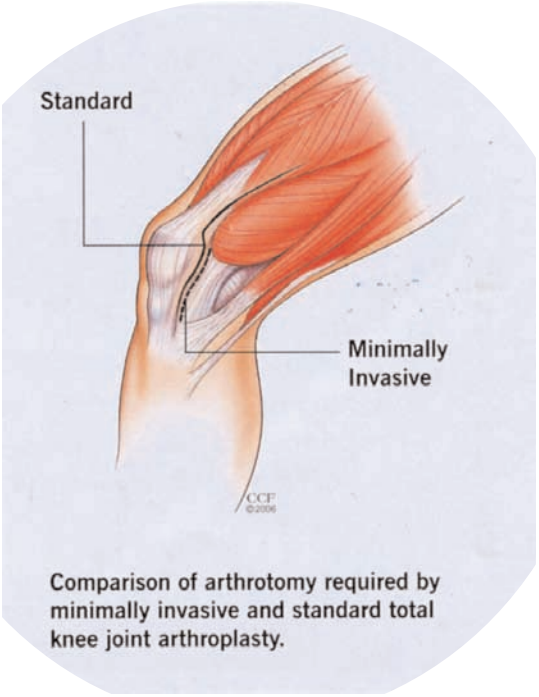


Minimally Invasive Knee Replacement

- Recent surgical techniques and instrumentation now allow knee replacement to be performed with a less invasive approach. This means:
  - * smaller incisions.
  - * less trauma to the muscle and tendons around the knee.
  - * decreased surgical exposure and dissection.
  - * decreased operative time.

- Minimally invasive techniques generally result in:
  - * less post operative pain.
  - * quicker recovery of range of motion.
  - * decreased length of stay in the hosptal.
  - * overall faster recovery.

- Minimally invasive replacements are not all or nothing - there is a continuum of how invasive the procedure needs to be based on:
  - patient size
  - bone size
  - how much inflamed tissue in the joint
  - how severe the knee joint deformity



Comparison of arthrotomy required by minimally invasive and standard total knee joint arthroplasty.

Replacements Designed for Women

- Recent studies have emphasized that female knees have more flexion and rotation on average than male knees.

- A Rotating-Platform and/or High Flex Knee is now available which offers the potential for greatly improved function, especially for the female patient. Specific activities that are easier with this newer design include: stair climbing, squatting and kneeling.

Partial Knee Replacement

- Sometimes patients develop osteoarthritis (bone on bone) in only one portion of the knee joint.

- In this case, a partial knee replacement can be performed - replacing only the portion that is worn, leaving the other joint surfaces alone.

- Advantages of a partial replacement include a faster recovery and a knee that feels more like your own.

Recovering After Knee Replacement

- General anesthesia is typically used during surgery. Antiinflammatory, long - acting narcotics (Oxycontin), Tylenol, and anti-nausea pills are given just before surgery and continued around-the-clock after surgery to minimize pain and nausea.

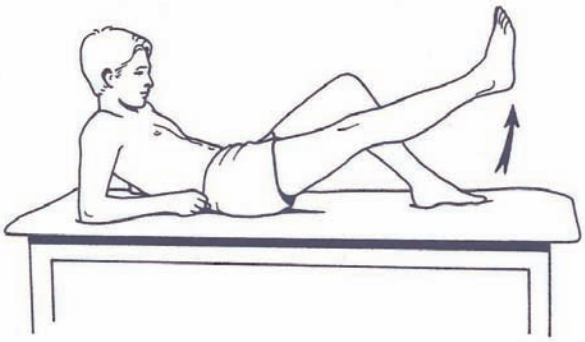
- Physical therapy starts the day of surgery. You will be assisted in getting out of bed, taking some steps, and learning exercises to be done in bed.

- Patients are generally in the hospital for about three days, then either:

  - some patients transfer to a rehabilitation facility for a 1-2 week stay, receiving intensive therapy twice a day or

  - most patients are discharged directly home and receive home therapy, which is usually scheduled three times a week. If you go home you have to come to the office for staple removal one week after surgery.

  - whenever possible, you will make the transition to out-patient therapy



- After the first postoperative visit with Dr. More or Dr. Pollack one month after surgery:

  - most patients continue outpatient physical therapy as long as needed (average 1 -2 months).

  - most patients start driving

  - overall activity level gradually increases

  - return to work or other activities depends on how you feel

- Improvement and recovery often continues for one year or longer. You have to be patient and keep doing your home exercises!

- Please note that after knee replacement, high impact activities (e.g. running, jumping) are not recommended.