

INFORMATION SHEET: PARTIAL KNEE REPLACEMENT

INTRODUCTION

In a “partial” knee replacement surgery, the surgeon resurfaces the damaged ends of selected bones of the knee joint with artificial parts. Joint surfaces that are “normal” (undamaged) are left in place. When one side of the knee joint is resurfaced, the partial knee is also known as a “unicompartmental” knee replacement. When the joint in the front of the knee is resurfaced, the partial knee is also known as a “patello-femoral” knee replacement. The artificial joint relieves pain and should improve function of the knee.

INDICATIONS AND GOALS FOR SURGERY

Most patients who consider partial knee replacement surgery have severe arthritis of one part of the knee or another condition that has led to the destruction of the cartilage covering the ends of the bones that make up a part of the knee. When the patient’s knee condition causes daily, disabling pain and the patient is unable to achieve pain relief with conservative (non-surgical) measures, then a partial knee replacement may be an option.

The primary goal of partial knee replacement surgery is to reduce knee pain while improving function and reducing limp.

DESCRIPTION OF THE SURGICAL PROCEDURE

During partial knee replacement surgery, the Orthopedic Surgeon will make an incision near the knee to expose the knee. All surfaces of the knee will be carefully assessed. Damaged cartilage and bone is then removed from the surfaces of the femur (thigh bone), tibia (shin bone) and/or patella (knee cap) and new artificial surfaces are fixed in place. If severe cartilage damage is limited to only a part of the knee, a partial knee replacement will be put in place and tested for motion and stability. All tissue that was cut for surgery will be repaired. In rare cases, the surgeon may find unexpected severe cartilage damage throughout the knee and elect to resurface the entire knee with a total knee replacement.

REHABILITATION

Rehabilitation will begin soon after surgery. The patient will participate in physical therapy in the hospital with the goal of achieving safe transfers from the bed, short distance walking, and an early exercise program. After discharge, the patient will continue with physical therapy and a home exercise program focused on motion and strength of the knee. The patient’s motivation and willingness to participate in the rehabilitation program are critical in determining their final strength and walking pattern.

POTENTIAL BENEFITS

The primary benefit of partial knee replacement surgery is to reduce pain in the knee. As rehabilitation progresses, the patient should also note an improvement in the motion of the knee and in walking pattern.

POTENTIAL RISKS

Partial knee replacement surgery is considered a major surgical procedure. Serious medical risks associated with the surgery may include, and are not limited to, problems with anesthesia, heart attack, heart beat irregularities, and stroke. In very rare situations, a person may die from complications related to surgery. Other risks related to this orthopedic procedure include, but are not limited to: blood clots; pulmonary embolism; infection; instability (the knee “giving out”); knee stiffness; differences in leg length; angulation, rotation or fracture of bones; hematoma (blood accumulation in the knee) which may require surgical drainage; nerve injury; blood vessel injury; and numbness and scarring around the surgical incision. Blood loss can occur during or after the surgery which may require transfusions. The implants may need to be removed or replaced if they become loose, wear out, or if there is evidence of infection. Partial knee replacement may not alleviate knee pain or restore the range of motion of the knee. In some cases, cartilage damage can occur to the non-replaced surfaces of the knee over time and lead to further knee surgery.

ACHIEVING THE GOALS OF SURGERY

Upon full recovery, most patients have significantly less pain. Most patients are able to walk more smoothly, have more endurance with their new knee, and are able to function more normally. A small percentage of patients have persistent discomfort, stiffness, and/or limp after surgery.

ALTERNATIVES TO SURGERY

Conservative (non surgical) measures may help control knee pain. These include the use of anti-inflammatory and/or pain medications, weight loss, use of a cane or other assistive device, a low stress exercise program, and reduction in heavy and/or pounding activities. In selected cases, other surgical options may exist such as cutting the bones about the knee to change leg alignment (osteotomy) or resurfacing of the entire knee with a “total” knee replacement. Another alternative to knee replacement surgery would be to seek no treatment at all.

CONSEQUENCES OF DECLINING CARE

Arthritis itself is not considered a life threatening illness. If the patient elects not to undergo treatment, then it is likely that knee pain will continue. The patient’s pain, deformity and disability may increase with time. If left unattended, arthritis may progress enough that a partial knee replacement will no longer be an option and total knee replacement surgery may be required. Surgery may also become very difficult and provide less predictable results.

MEMBERS OF THE SURGICAL TEAM

The Orthopedic Surgeon will require the assistance of a team of experts during surgery. Physicians other than the Orthopedic Surgeon, including, but not limited to Joint Reconstruction Fellows and/or Orthopedic Residents, or Physician Assistants will be performing important tasks related to surgery. These activities are in accordance with

the hospital's policies and, in the case of the Residents, based on their skills set and under the supervision of the responsible Orthopedic Surgeon.

LONG TERM CONCERNS

Long term complications are possible after partial knee replacement. Late loosening, wear, infection or progressive bone loss may occur and may require re-operation. Damage may occur to the remaining cartilage of the knee (arthritis) which may lead to pain and the need for revision knee surgery. Close follow-up is necessary to monitor for changes around the joint replacement which could threaten the strength of the bone near the joint replacement. The risk of problems related to wearing of the artificial joint surfaces increases over time. Regular follow-up (every one to two years) becomes more important as the joint replacement becomes older since the risk of problems related to wearing of the artificial joint surfaces increases over time.

PARTICIPATION IN CARE

The patient's participation in his/her care is critical to the success of partial knee replacement. The patient should provide accurate and complete information about their health and any change in condition after surgery. Patients are encouraged to follow the recommendations made for their care and to ask any questions they may have.