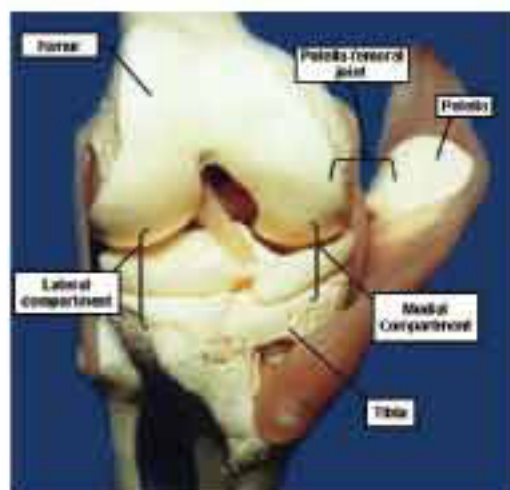

UNICOMPARTMENTAL KNEE ARTHROPLASTY



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Unicompartmental Knee Arthroplasty

The knee is designed with three compartments. In other words, there are three areas of articulation where the femur, tibia, and patella make contact.



The femur (thigh bone) and tibia (shin bone) make contact in two articulations (compartments) and the patella (knee cap) make a gliding articulation with the femur. People with arthritic conditions may have destruction of one, two or three compartments.

Patients with osteoarthritis in one compartment may not need a total joint replacement to relieve pain and restore function of the knee. The unicompartmental knee arthroplasty is used to resurface and rebuild the diseased side of your knee instead of replacing the entire joint with a total knee replacement. The device used in this technique is much smaller than a total knee implant and leaves the healthy tissue intact. This unique treatment option offers distinct advantages over total knee replacement surgery when applied to the appropriate patient indications.

Persons who can benefit from this type of joint resurfacing are usually age 55 and older and show one or more of the following symptoms:

- Pain while standing
- Pain while walking
- Pain changing position, such as sitting to standing
- Persistent knee swelling
- Giving out or locking of the knee
- Failure of the knee to respond to medication

X-rays taken of the knee while standing can also indicate if this procedure may be appropriate. The X-ray must show complete loss of the joint cartilage in one of the two weight-bearing compartments as demonstrated below.

X-ray showing a loss and formation of osteoarthritis in one compartment.



This type of implant surgery uses a short incision. There is no blood loss and the kneecap is not disturbed during the procedure. Benefits of this technique include less postoperative discomfort, a shorter hospital stay, and a more rapid recovery. Another benefit of this procedure is less bone is removed. Since this technique preserves bone, future total knee replacement procedures may be easily performed if necessary.

Overall, this procedure is designed to aid in relieving weight-bearing pain, rebalancing the knee, improving knee function, and preventing or delaying the need for total knee replacement.

Following surgery, physical therapy and walking with crutches or a walker is started the day of surgery. The usual length of hospitalization is one day. Ambulation aids, such as crutches or a walker, are used for two weeks. Many patients will work with a physical therapist. A good recovery may require six to eight weeks.

Example of a post-surgical unicompartmental implant



Example of a post-surgical total knee implant





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