Pinellas Medical Associates

Orthopedic Surgery and Neurology

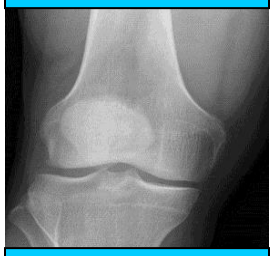
5880 49th Street N, Ste 104, St. Petersburg, FL 33709
2299 9th Avenue N, Ste 1A, St. Petersburg, FL 33713
Phone: 727-528-6100; Fax: 727-528-7895

Patient Information Sheet: Unicondylar Knee Replacement

This is a general information packet for patients undergoing Unicondylar knee replacement.

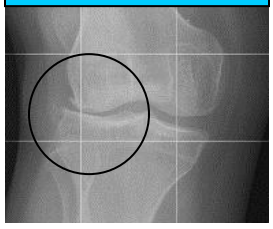
Osteoarthritis (OA) is a degenerative disease of joints caused by a breakdown and eventual loss of articular cartilage. Articular cartilage lines the bony joint surfaces and allows the joint to move in a near frictionless environment. There are many reasons for cartilage loss including wear, trauma and genetics. Once the knee joint cartilage is worn away, patients start to experience pain, stiffness and loss of function. The knee joint may assume an altered alignment such as a bowlegged or knock-kneed position.

Knee Joint with No Osteoarthritis



The knee joint is made up of three compartments consisting of the outside (lateral), inside (medial) and the knee cap (patella femoral). Only one of the three compartments may experience osteoarthritic changes. The degenerative condition may spare the other knee areas leaving good working cartilage. A Unicondylar (one condyle) knee replacement is ideal when only one portion of the knee joint needs to be replaced. Often this surgery can relieve the pain of regional osteoarthritis and maintain a pain-free knee for an extended period. In the event that the knee develops multiple compartment osteoarthritis, a total knee replacement can be utilized even after undergoing unicondylar replacement surgery.

Knee Joint with Osteoarthritis of only one compartment



There are many advantages of a unicondylar replacement over a total knee replacement. See table one for a list of these benefits. Unicondylar replacement does not prevent osteoarthritis from forming in the remainder of the knee and a future knee replacement is often required.

Table 1. Benefits of unicondylar replacement over traditional knee replacement:
Smaller incision
Decreased blood loss (no blood donation needed)
Quicker return to activity/ work
Reduced hospitalization (1-2 days)
Less Post-op discomfort

As with any surgical procedure, there are risks to unicondylar knee replacement. These risks include but are not limited to infection, blood clot (DVT), bleeding, and nerve injury.

Pre-Surgery:

Before surgery, patients are instructed to continue to be as active as the knee permits. The following are specific instructions leading up to unicondylar knee replacement surgery:

Unicondylar Implant

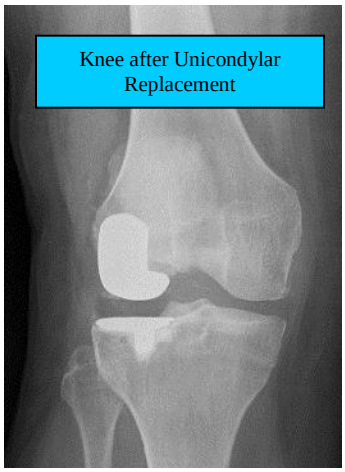
- Anti-inflammatory meds such as ibuprofen or aspirin must be stopped 10 days prior to surgery. Utilize ice and elevation and Tylenol to control pain and swelling during this period
- On the night before surgery, do not eat after midnight (no chewing gum or lozenges)
- On the morning of surgery you may take your daily pills with a sip of water
- Your surgery time will be confirmed the day before the surgery by the hospital. The original time may be adjusted secondary to patient needs
- Patients should bring their MRI and X-rays to the surgery

Surgery:

The length of the procedure is approximately 1.5-2 hours. Your nurse will bring you into the pre-op area were you will have an IV placed and meet with your anesthesiologist. The anesthesiologist will discuss the different types of anesthesia. General anesthesia is often utilized to assure a comfortable surgery. This means that you will be "asleep" and completely unaware of the surgery until you wake up in the recovery area.

Post-Surgery:

After the surgery is completed, you will awaken in the operating room and be moved to the recovery area. Once in recovery, you will meet a nurse who will take care of you prior to transfer to the hospital unit (2 hours later). Expect to stay in the hospital for 1-2 days.



Pain Control:

Femoral Nerve Block: Upon your consent, a femoral nerve block will be provided by an Anesthesiologist for pain control. This consists of an injection of Marcaine (like Novacaine) into the region around the femoral nerve and may decrease leg pain for up to 12 hours.

PCA pump: Shortly after you are transferred to the hospital unit, you will be provided a pain button that will deliver a set amount of pain medication at your control. This pump will be discontinued the next morning

Oral pain medicine: Oral pain medicine will be provided once the PCA is discontinued on post-op day one. A pain pill will be selected that best controls your pain. A pain medication prescription will be provided to you prior to discharge. You may take the prescribed medication as directed. You should expect to experience minimal to moderate knee discomfort for several days and even weeks following the surgery. Patients often only need prescription narcotics for a few weeks following surgery and can then switch to over-the-counter medications such as Tylenol or Ibuprofen.

- Ice should be used to reduce pain and swelling. In general apply ice for 20 minutes every 2 -3 hours during the initial postoperative period.
- IV antibiotics will be provided for 24 hours after completion of the surgery
- A CPM (Continuous Passive Motion) will be provided in the hospital. A unit maybe provided at home for about 2 weeks if covered by insurance or if you are comfortable with fee (around 25-30 dollars/day). These machines are utilized to increase knee range of motion. Your physical therapist will explain how to use this equipment.
- Physical Therapy: You will receive PT prior to discharge from the hospital. PT will work on ambulation, functional mobility and leg exercises. You should be comfortable walking independently with crutches before leaving the hospital. You will be able to put as much weight as tolerated on your knee. You should participate in the home exercise program provided in this packet and the program made by your hospital physical therapist until your post-op appointment where outpatient physical therapy will be initiated.
- If the bandage is draining, reinforce it with additional dressings for the first 48 hours. After 48 hours remove the bandage and leave the steri-strips in place. Showering is acceptable at this time. Do not submerge or scrub the knee. White steri-strips have been placed over the incision, these will fall off on their own, do not pull them off.
- Skin numbness often occurs around the incision (most common on outside of knee). This usually returns but may be permanent.
- You may shower on post up day one. Keep incision covered when showering for up to two days post-op. Do not wet wound until it is completely dry (non-draining).

- Take one 325 mg (full strength) aspirin in the morning and one at night daily for 6 weeks (unless otherwise instructed) to prevent blood clots.
- Eat a regular diet as tolerated and please drink plenty of fluids.
- **First post-op appointment is 2 weeks after the surgery.** Please call the office if you have any problems or questions.
- You may drive once you establish full control of your extremity (able to perform a straight leg raise, etc.). If your right knee was operated on, this may take several days or even weeks

- Call office for temperature >102 degrees, excessive swelling, pain or redness around the incision sites.
- Maximal improvement from surgery can be up to a year; typically patients are extremely mobile at 6-8 weeks.
- Golf and skiing can start after 8-10 weeks
- Plan at least 2 weeks away from work (sedentary job) or school. Utilize this time to decrease swelling and participate in your home exercise program. You may resume work once the pain and swelling resolves (this varies based on job activity).

Post-Op Rehabilitation Protocol – Unicondular Knee Replacement

***PHASE 1 (DAYS 0-3)*:** In Hospital

Goals: Minimize effusion, Range of motion 0-110°, Normalize gait pattern/balance and propriception abilities.
Treatment plan:

1) Utilize camped or CPM as directed by you physical therapist.
2) Swelling Control with ice and compression wrap
3) Participate in exercise program as directed by your physical therapist
    - Quad setting, SLR, heel slides, isometric hamstring/quadriceps contraction
    - Ankle pumps
4) WBAT (weight bearing as tolerated) with crutches

PHASE 2 (DAY 3 - WEEK 3): Home Rehabilitation

Goals: Full knee ROM in extension and flexion, progress quadriceps/hamstring strengthening, progress towards independent mobility
Treatment plan:

1) Continue with swelling control
2) Range of motion exercise
3) Continue with strengthening exercises
4) Independent ambulation

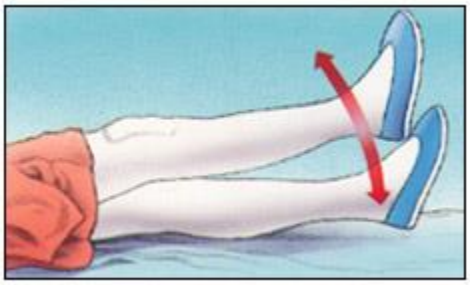
PHASE 3 (WEEKS 3-6): Out-patient Physical Therapy (if needed)

Goals: Full lower extremity strengthening/conditioning program, Independent mobility
Treatment plan:

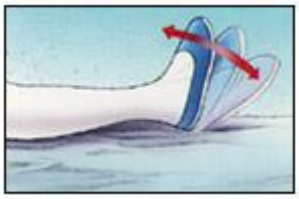
1) Range of motion and strengthening
2) Progress dynamic balance training
3) Edema reduction

Start the following exercises as soon as you are able. You can begin these in the recovery room shortly after surgery. You may feel uncomfortable at first, but these exercises will speed your recovery and actually diminish your post-operative pain.

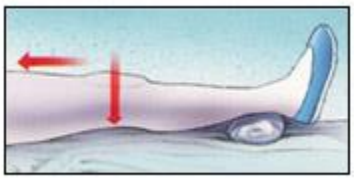
Quad Sets - Tighten your thigh muscle. Try to straighten your knee. Hold for 5 to 10 seconds. Repeat this exercise approximately 10 times during a two minute period, rest one minute and repeat.



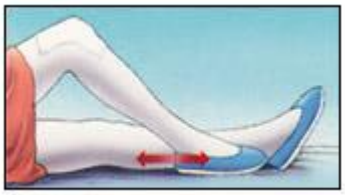
Straight Leg Raises - Tighten the thigh muscle with your knee fully straightened on the bed, as with the Quad set. Lift your leg several inches. Hold for 5 to 10 seconds. Slowly lower. Repeat until your thigh feels fatigued.



Ankle Pumps - Move your foot up and down rhythmically by contracting the calf and shin muscles. Perform this exercise periodically for two to three minutes, two or three times an hour in the recovery room. Continue this exercise until you are fully recovered and all ankle and lower-leg swelling has subsided.



Knee Straightening Exercises - Place a small rolled towel just above your heel so that it is not touching the bed. Tighten your thigh. Try to fully straighten your knee so that the back of your knee touches the bed. Hold fully straightened for 5 to 10 seconds. Repeat until your thigh feels fatigued.



Bed-Supported Knee Bends - Bend your knee as much as possible while sliding your foot on the bed. Hold your knee in a maximally bent position for 5 to 10 seconds and then straighten. Repeat several times until your leg feels fatigued or until you can completely bend your knee.

Frequently Asked Questions

When can I drive?

> You can drive when you have full control of your leg and you are off all narcotic pain medication.

Why does the skin over knee feel somewhat numb?

> Skin numbness often occurs around the incision (most common on outside of knee). This is a common result of incising the skin and usually returns but may be permanent.

Why do I have bruising on the back of my leg and ankle?

> The bruising found in the back of the knee or ankle is often due to residual post-operative blood exiting the knee joint and entering the leg. Gravity will force the blood to the dependent locations of the leg such as the heel with standing or the back of leg with lying down.