Orthopaedic Sports Specialists, P.C.
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Post Operative Instructions

Unicompartmental (Mini) Knee Replacement

Your Post-Operative Bandages:

For the first three days in the hospital I use an ace bandage to hold your dressing and **cryo-cuff** in place. On the third hospital day I will exchange the ace bandage for a Ted Hose stocking which will hold the gauze in place and now the **cryo-cuff** will go on the top layer. The cryo-cuff is used to reduce swelling and post-operative inflammation around the knee, but more about that later. Finally, calf-high plastic pneumatic stockings are used for the first 3 days after surgery to decrease the risk of getting a blood clot in your legs.

Once you leave the hospital your post-operative dressing has two layers that you need to understand in order to properly care for your knee following surgery. Your incisions were closed with a single long dissolving stitch, which were covered with small white tapes called Steri-Strips. Your Steri-Strips should be left in place for at least12 days after surgery, or until they fall off on their own. The second layer is gauze. This can be discontinued when your wound is dry. We avoid using tape on your knee since it will restrict your range of motion. Therefore, I hold the gauze in place with your white Ted Hose stockings. You should wear the Ted Hose stockings 24 hours a day for 2 weeks, then only during the day for 4 weeks after surgery.

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Elevation & Cryo Cuff:

One important goal following surgery is to minimize swelling around the knee. The best way to achieve this is with the frequent application of ice and by keeping the leg elevated. Most patients will satisfy this goal with a **cryo-cuff** that cools the knee after surgery.

For the first few days after surgery the **cryo-cuff** is placed over your dressing and under your Ace-bandage, later it can be placed directly on the knee or over a thin towel. The first week after surgery use the **cryo-cuff** for 30 minutes 6-10 times a day. After you leave the hospital it is important to continue to use your cryo-cuff. At this point use it 2-6 times a day for 20 to 30 minutes. This works best when you use it after physical therapy, after you use the CPM machine, or after times of increased activity such as walking or exercise. Many of my patients continue to use the cryo therapy unit for several months after surgery.

If you are going to a nursing home after surgery, make sure you remind the nursing staff to refill the ice several times a day. Remind your nurse that this device will decrease your pain and allow you to use less pain medication.

Washing & Bathing:

You should be careful to keep the wound clean and dry for the first 5 days after surgery. It is OK to shower directly over your Steri-Strips (they won't come off) beginning on the fifth day after surgery if the wound is dry and there is no drainage. It is also OK to use soap on your leg and over the Steri-Strips. This shower should be quick. I would prefer that you do not take a bath until 2 weeks after surgery. It is OK to go into a swimming pool 4 weeks after surgery.

The yellow discoloration you will find on your leg is a long lasting surgical prep called DuraPrep, which is used because it kills bacteria on your skin hours longer than old fashion iodine surgical preps. The yellow discoloration will not come off with soap and water, instead you will need rubbing alcohol to remove it. This can be done the 5 days after surgery unless it is causing your leg to itch, then it can be removed sooner.

Walking & Crutches:

We encourage all of our patients to start standing and walking the day after surgery. Physical therapy begins on the first day after surgery - while you are in the hospital. Even though you have an Epidural in your back, it is fine to start standing, sitting, and walking. Do not attempt to walk on your own, since it will take a while to get your balance - please wait for your physical therapist or nurse to help you.

We start walking with the use of a walker. As your skill and strength improves you will advance to a quad-cane or regular cane. Each patient will advance at their own pace, with some patients switching to a cane in days while others will take weeks. Discuss your progress with your therapist each day to ensure that you advance towards your goals.

Continuous Passive Motion (CPM):

Beginning the day after surgery your knee will be placed into a CPM machine. The purpose of this treatment is to regain the full bending motion of your knee. The sooner we gain knee motion the quicker your recovery. Your knee will initially feel stiff after surgery, researchers have discovered that the use of CPM will reverse that feeling and speed your recovery. CPM is only one component of your post-operative rehabilitation and not a substitute for physical therapy.

Since you have an Epidural pain catheter for the first 48 hours after surgery, with CPM you will increase knee range of motion (ROM) with much less pain than you would expect. The CPM is programmed by your nurse with different degrees of knee flexion. Learn how your machine is being set so you can follow your own progress.

GOALS: For all of my patients I expect a specific amount of progress each day. If it is too painful to reach these goals you should increase your pain medication dose so that your progress continues. When you are placed into the CPM start at a gentle 0^{o} to 30^{o} setting then every 15 minutes increase by 5^{o} or 10^{o}. The first day after surgery you should achieve 45^{o} of knee flexion, the second day 65^{o} to70^{o}, and by the third or forth day 90^{o} of flexion. By one week post-op you should increase to 100^{o} or more. After 2 weeks you can increase bending as high as you can tolerate. I expect the CPM device to by used at home for 3 to 4 weeks after surgery. At home use it for 1 to 2 hours, three times a day.

Physical Therapy

In-patient: From the first day after surgery physical therapy is critical for a successful knee replacement. While in the hospital you should see the therapist twice a day. The goals while at the hospital are transfer (moving from the bed to chair to standing), walking with a walker, and range of motion exercises, especially getting the knee all the way straight.

In-patient Rehabilitation Center: Some patients will go from the hospital to a rehab center. One of our most important goals during this phase of your recovery is improving the function of your knee. You should receive therapy two times a day. Every day ask your therapist if your knee is going to full extension and how deeply you can flex your knee (for example "minus 5^{o} of extension and flexion to 75^{o} "). Your therapist will work on the quality of your gait and help you go up and down stairs.

Out patient in Home Therapy: Whether you went home from the hospital or to the rehab center you should have in home physical therapy until you can go to an out patient physical therapy center. The social worker will make these arrangements before you go home.

Out patient Physical Therapy: The goal of physical therapy is to first OK how your knee responded to the surgical procedure, therefore they will remove your dressing and look at your wound. They will re-introduce you to your knee so that you feel comfortable with your surgery and aren't afraid to start doing things. Your therapist will start range of motion, gait, and strength exercises on your first visit. If they find anything unexpected they will let Dr. Joyce know right away.

Follow up appointment:

We try to give all of our patients a follow-up office visit at the same time we schedule your surgery. Sometimes I find things, or do things, I didn't anticipate during your surgical procedure, therefore I may want to see you in the office sooner than originally planned. Typically I want to see my patients in the office about 2 weeks after surgery. Since there are no stitches to remove we can go several days longer if necessary.

Prevention of Blood Clots:

Blood clots can form in your legs after big operations such as a knee replacement. We take several measures to minimize the chance of this serious complication. Beginning during your operation we put plastic pneumatic stockings on your legs. These are continued for 3 days after surgery. You can feel these stockings get tight and then loosen as they improve circulation in you legs. While I know that these stockings are hot and uncomfortable, they dramatically decrease your risk of getting a blood clot.

Once your Epidural catheter is removed from your back it is safe to begin a "blood thinner". I use an injectable medication called Lovenox. I will continue this medication for 10 days after you leave the hospital. Many patients (or there spouse) learn how to do the injections themselves, but for those that don't, a nurse will come to your house to administer the daily injection. Because you are taking this "blood thinner" I stop the use of NSAIDs form of arthritis medication (such as Motrin or Naprosyn) which can also interfere with blood clotting. However, it is acceptable to take Celebrex with Lovenox. After you have finished with the Lovenox injections you should take one baby aspirin a day (325mg) for 6 months.

Driving:

There are restrictions on driving after surgery and precautions that should be followed once your get back to your car. Don't rush things. When you first begin driving, do it with someone else in the car to give you feedback on how you are doing. Start with short trips and gradually work your way up to long drives. You can consider driving 3 to 6 weeks after surgery if you fully consider the following points:

First, for those who own cars with automatic transmission, if you had right knee surgery you will need more time before driving than those patients with left knee surgery.

Second, when you first start driving, you should have someone else drive you to an empty parking lot where you can safely practice. Only when you feel comfortable should you begin short trips around town.

Third, you should not drive if you are still taking significant doses of pain medication. Narcotics will slow your reflexes and dull your judgment.

Fourth, you should not drive until the pain in the knee has decreased to a tolerable level and the knee has more than 90 degrees of motion.

Fifth, driving is easy, sudden and unexpected stopping is difficult. If you need to stop the car suddenly, pain may slow your reflexes as you reach for the brake pedal. Practice this in a safe setting before going out on the road.

Medications:

Pain control: I will usually prescribe Vicodin (hydrocodone) which is a strong narcotic pain medication. It will begin to work within 15 minutes after taking it with a maximal effect in one to two hours. For some sensitive patients, when taking the first few doses of Vicodin you may experience nausea or an episode of vomiting. The best way to prevent this is to take the medicine with a little food, start with just one pill, and be patient while the medicine begins to work. Usually, after the first few doses the nausea will go away. If the nausea persists, it is possible that a similar result will occur with other narcotic pain pills. It you take a full dose of this medication for more than 4 or 5 days it can lead to constipation. Normally, Vicodin is taken every 6 hours but if the pain is severe, it can be used every 4 hours.

Other Medication: Colace to soften your stool, Vitamins and Iron replacement. Resume your pre-operative medications.

What to watch out for:

- Pain that is increasing every hour in spite of the pain medication.
- Drainage from the wound more than 5 days after surgery.
- Increasing redness around the knee (some redness is normal)
- Pain or swelling in your calf
- Fever greater than 101^{o}
- Increasing pain with walking.
- Locking or catching within the knee that is getting worse not better.
- Unable to keep food or water down for more than one day.

Who To Call for Questions and Problems:

If you are having problems or there are questions you need answered then please call our office at 860-652-8883 and our nurse will help you. We are open between 8:30 and 4:30 pm, Monday to Friday.

We realize that after surgery some problems or questions are urgent and can not wait until normal working hours. Under these circumstances please call 860-652-8883 anytime (24 hours a day, 7 days a week) and the doctor on-call, or myself will return your call. If you do not receive an answer within 20 minutes there may be a problem with the beeper so please call again.

If an emergency were to occur you can always go straight to the emergency room for immediate attention.

Wishing you - All the Best,

Michael Joyce, MD