Activity: After your knee arthroscopy and microfracture, you should be given crutches (or you may use a walker). These should be used for 6 – 8 weeks and you may put your foot on the ground for balance but you should not put full weight on the operative leg. Elevation of the leg is important for the first day after the surgery as it helps to reduce the leg swelling. After 1-2 days, if your knee is feeling good, you may increase your activity level gradually. Use ice packs to the knee for the first 24-48 hours after surgery. Apply the ice as frequently as needed after surgery. After 24 hours, you may use the ice packs two or more times a day for 20 minutes at a time, if desired for comfort. The CPM machine and the attached exercises can be started at 24 - 48 hours after surgery.

Dressings: The post op dressing should remain in place for 24 hours after the surgery. Then you can remove the dressing and shower. Clean the incisions with rubbing alcohol and cover the small incisions with Band-Aids after the shower. It is OK to get the arthroscopy incisions wet in a shower after 24 hours but do not soak them in bath water for one week. Re-wrap the leg with the ace bandage after the skin is dry.

Medications: You may resume your normal medications that you took prior to surgery. If you are able to tolerate aspirin, take one tablet (325 mg) daily until you have resumed normal activity or are seen in the office. Your prescription for pain medication should be filled after you leave the Ambulatory Surgery Center. Medication refills will only be done by me or my office during the week from 8am - 4pm. Narcotic pain medications will not be refilled after 4 pm or on the weekends. Plan ahead.

Medications for postoperative pain are as follows:

1-2 pills every 4 hours if you have pain.
You may take 3 tabs of every 4 hours for very severe pain.
If you are not taking the above narcotic medications, you may take Extra-Strength Tylenol as directed on the label. You may take over-the-counter anti-inflammatory medications such as Advil or Aleve if you know you can tolerate those medications and are not taking blood thinners.

Once the nerve block begins to wear off, start you pain medicine.

Follow up: Make an appointment to be seen approximately ~7-10 days after surgery. I will discuss the procedure and the findings during surgery at this visit.

Problems: Complications from knee surgery can occur and you must be aware of the early warning symptoms of some of the more serious problems that may arise. The risk of surgery is never “zero”. Call the office for a temperature over 101 degrees, pain not controlled by the pain medication, or drainage from the incision.

Phlebitis: This is a blood clot in the leg. These symptoms include calf pain (i.e.: cramps or a “Charlie horse”) in the leg. Other symptoms include chest pain and shortness of breath. Phlebitis is a serious complication if it is undiagnosed or untreated, therefore you should call the office immediately if you have any of these complaints.

CALL THE OFFICE OR EMERGENCY ROOM IF ANY OF THE ABOVE PROBLEMS OCCUR.

If you have any questions or problems, please call the office. The office is open Monday through Friday from 9:00am to 5:00pm and can be reached at 860-649-2267. After hours, call the office to speak with the covering doctor.
The microfracture procedure is performed when there is an area of damaged joint cartilage in the presence of otherwise healthy, normal cartilage. It may also be performed if there is mild arthritis. The procedure involves removing the damaged cartilage within a contained defect and puncturing the underlying bone with an arthroscopic awl. This creates small channels into the knee and allows blood cells to enter the knee. This blood patch contains stem cells which, over the next several months, will turn into fibrocartilage. This acts as patch in the affected area of the knee.

To get this fibrocartilage to form properly and to become as durable as possible, several things are required.

- Non-weight bearing for 6 - 8 weeks.
- Properly oriented stresses applied to the newly developing cartilage.
  - In other words, you must use a CPM (Continuous Passive Motion) machine for 6 - 8 weeks for 6 hours per day.
  - The CPM machine will be arranged by our office and delivered to your home by a company that supplies them. We will do our best to get your insurance company to cover the expense of the machine for 6 weeks, but they sometimes refuse to pay.
  - The CPM machine can be used 1 hour at a time or for 6 consecutive hours. You can use it during the day, but some patients are able to sleep with the knee in the machine and working all night.
- Instructions for the CPM are as follows:
  - Start the CPM at 0 to 45 degrees of flexion for at least 6 hours per day. This may be continuously or in shorter periods. If possible, you can sleep in the CPM.
  - Increase the range of motion by 10 degrees per day as tolerated.
Regular exercise to restore your knee mobility and strength is necessary. For the most part this can be carried out at home. We recommend that you exercise approximately 20 to 30 minutes two or three times a day. We suggest some of the following exercises. The following guide can help you better understand your exercise or activity program that may be supervised by a therapist at the direction of your orthopedic surgeon. As you increase the intensity of your exercise program, you may experience temporary set-backs. If your knee swells or hurts after a particular exercise activity, you should lessen or stop the activity until you feel better. You should Rest, Ice, Compress (with an elastic bandage), and Elevate your knee (R.I.C.E.). Contact your surgeon if the symptoms persist.

Initial Exercise Program

**Hamstring Contraction, 10 Repetitions** - No movement should occur in this exercise. Lie or sit with your knees bent to about 10 degrees. Pull your heel into the floor, tightening the muscles on the back of your thigh. Hold 5 seconds, then relax. Repeat 10 times.

![Hamstring Contraction](image)

**Quadriceps Contraction, 10 Repetitions** - Lie on stomach with a towel roll under the ankle of your operated knee. Push ankle down into the towel roll. Your leg should straighten as much as possible. Hold for 5 seconds. Relax. Repeat 10 times.

![Quadriceps Contraction](image)

**Straight Leg Raises, 10 Repetitions** - Lie on your back, with uninvolved knee bent, straighten your involved knee. Slowly lift about 6 inches and hold for 5 seconds. Continue lifting in 6-inch increments, hold each time. Reverse the procedure, and return to the starting position. Repeat 10 times. Advanced: Before starting, add weights to your ankle, starting with 1 pound of weight and building up to a maximum of 5 pounds of weight over 4 weeks.

![Straight Leg Raises](image)

**Buttock Tucks, 10 Repetitions** - While lying down on your back, tighten your buttock muscles. Hold tightly for 5 seconds. Repeat 10 times.

![Buttock Tucks](image)

**Straight Leg Raises, Standing, 10 Repetitions** - Support yourself, if necessary, and slowly lift your leg forward keeping your knee straight. Return to the starting position. Repeat 10 times. Advanced: Before starting, add weights to your ankle, starting with 1 pound of weight and building up to a maximum of 5 pounds of weight over 4 weeks.

![Straight Leg Raises, Standing](image)
Intermediate Exercise Guide

Terminal Knee Extension, Supine, 10 Repetitions - Lie on your back with a towel roll under your knee. Straighten your knee (still supported by the roll) and hold 5 seconds. Slowly return to the starting position. Repeat 10 times. Advanced: Before starting, add weights to your ankle, starting with 1 pound of weight and building up to a maximum of 5 pounds of weight over 4 weeks.

Straight Leg Raises, 5 Sets, 10 Repetitions - Lie on your back, with your uninvolved knee bent. Straighten your other knee with a quadriceps muscle contraction. Now, slowly raise your leg until your foot is about 12 inches from the floor. Slowly lower it to the floor and relax. Perform 5 sets of 10 repetitions. Advanced: Before starting, add weights to your ankle, starting with 1 pound of weight and building up to a maximum of 5 pounds of weight over 4 weeks.

Terminal Knee Extension, Sitting, 10 Repetitions — While sitting in a chair, support your involved heel on a stool. Now straighten your knee, hold 5 seconds and slowly return to the starting position. Repeat 10 times.

Hamstring Stretch, Supine, 10 Repetitions — Lie on your back. Bend your hip, grasping your thigh just above the knee. Slowly straighten your knee until you feel the tightness behind your knee. Hold for 5 seconds. Relax and repeat 10 times. Repeat with the other leg. If you do not feel this stretch, bend your hip a little more, and repeat. No bouncing! Maintain a steady, prolonged stretch for the maximum benefit.

Hamstring Stretch, Supine at Wall, 10 Repetitions — Lie next to a doorway, with one leg extended. Place your heel against the wall, and, with your knee bent, move your hips toward the wall. Now begin to straighten your knee. When you feel the tightness behind your knee, hold for 5 seconds. Relax and repeat 10 times. The closer you are to the wall, the more intense the stretch. Repeat with the other leg.