

# KNEE ARTHROSCOPY PROTOCOL

"Where there's a scope... there's hope...'

A small camera and instruments are inserted into your knee joint to address the conditions that you experience. This may be the removal of a loose piece of bone, removal of impinging or inflammatory tissue, or the treatment of a meniscal injury. It is not uncommon for orthopaedic surgeons to uncover additional injuries that preoperative MRI or other advanced imaging was not sensitive enough to identify.

\*\*Note that these are guidelines and may be adjusted by your surgeon based on your diagnosis and intra-operative findings\*\*

## Importance of Exercise

Regular exercise to restore your knee mobility and strength is necessary. For the most part, this can be carried out a home.

We may recommend that you exercise approximately 20 to 30 minutes two or three times a day. In addition, we recommend that you engage in a walking program when able.

# Before You Start

The following exercises may help you to recover faster, stronger, and with less pain. The following guide can help you better understand your exercise or activity program that may be supervised by a therapist or based on home exercise program (HEP).

As you increase the intensity of your exercise program, you may experience temporary set backs. If your knee swell or hurts after a particular exercise activity, you should lessen or stop the activity until you feel better.

You should Rest, Ice or cold compress with cryotherapy, Compress (with an elastic bandage), and Elevate your knee (R.I.C.E.). Contact your orthopaedic surgeon if the symptoms persist.

Unless instructed otherwise by your orthopaedic surgeon, you will take aspirin 81mg two times per day for 30 days following your surgery. This is meant to minimize your risk for developing deep vein thrombosis and potential venothromboembolic events that may lead to a blood clot.

# INITIAL EXERCISE PROGRAM

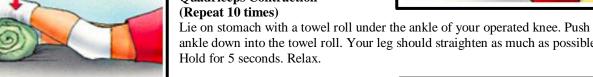
# Isometric ("Same Length") Hamstring Contraction (Repeat 10 times) No movement should occur in this exercise. Lie or sit with your knees bent to about 10 degrees. Pull your heel into the floor, tightening the muscles on the

back of your thigh. Hold 5 seconds, then relax.



# **Quadriceps Contraction**

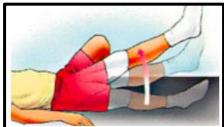
ankle down into the towel roll. Your leg should straighten as much as possible.



# Straight Leg Raises, Supine (Repeat 10 times)

Lie on your back (supine), 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.

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.



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### **Buttock Tucks (Repeat 10 times)**

While lying down on your back, tighten your buttock muscles. Hold tightly for 5 seconds.





# Straight Leg Raises, Standing (Repeat 10 times)

Support yourself, if necessary, and slowly lift your leg forward keeping your knee straight. Return to the starting position. Alternatively, you may perform while sitting if you experience difficulty balancing.

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.

#### INTERMEDIATE EXERCISE PROGRAM

#### Terminal Knee Extension, Supine (Repeat 10 times)

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. *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, Supine (5 Sets of 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.

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.



# Partial Squat, with Chair (Repeat 10 times)

Hold onto a sturdy chair or counter with your feet 6-12 inches from the chair or counter. Do not bend all the way down. DO NOT go any lower than 90 degrees. Keep back straight. Hold for 5-10 seconds. Slowly come back up. Relax.



Standing with the involved knee bent, gently pull heel toward buttocks, feeling a stretch in the front of the leg. Hold for 5 seconds.



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#### ADVANCED EXERCISE PROGRAM

# **Knee Bend, Partial, Single Leg (Repeat 10 times)**

Stand supporting yourself with the back of a chair. Bend your uninvolved leg with your toe touching for balance as necessary. Slowly lower yourself, keeping your foot flat. Do not overdo this exercise. Straighten up to the starting position. Relax.



# Step-ups, Forward (Repeat 10 times)

Step forward up onto a 6-inch high stool, leading with your involved leg. Step down, returning to the starting position. Increase the height of the platform as strength increases.



# **Step-ups, Lateral (Repeat 10 times)**

Step up onto a 6-inch high stool, leading with your involved leg. Step down, returning to the starting position. Increase the height of the platform as strength increases.



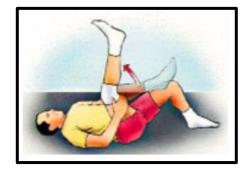
# **Terminal Knee Extension, Sitting (Repeat 10 times)**

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.



#### Hamstring Stretch, Supine (Repeat 10 times)

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. Repeat with the other leg. If you do not feel this stretch, bend at your hip a little more, and repeat. No bouncing! Maintain a steady, prolonged stretch for the maximum benefit.



#### Hamstring Stretch, Supine at Wall (Repeat 10 times)

Lie next to a doorway with one leg extended. Place your heel against the wall. The closer you are to the wall, the more intense the stretch. 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. Repeat with the other leg.

# Exercise Bike (Begin 10 Minutes Per Day)

Start pedaling for 10 minutes a day. If you have access to an exercise bike, set the seat high so your foot can barely reach the pedal and complete a full revolution. Set the resistance to "light" and progress to "heavy." Increase the duration by one minute a day until you are pedaling 20 minutes a day.

## Walking (After 2 Weeks)

An excellent physical exercise activity in the middle stages of your recovery from surgery (after 2 weeks).

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#### Running (After 6-8 Weeks)

Running should be avoided until 6 to 8 weeks because of the impact and shock forces transmitted to your knee. Both walking and running activities should be gradually phased into your exercise program.

**PHYSICAL THERAPY**: Physical therapy typically begins 2-4 weeks post op to focus on restoration of ROM, edema control, and scar reduction and then focus on restoration of proper gait mechanics and strengthening.

<u>**DRIVING**</u>: Prior to driving, you must be able weightbear on your right foot without crutches. If your left knee, you may drive automatic transmission car when off narcotic pain medication.

<u>FULL ACTIVITY</u>: This may take 6 to 18 months. There is no guarantee on outcome. All conservative management options have risk of worsening pain, progressive irreversible deformity, and failing to provide substantial pain relief. All surgical management options have risk of infection, skin or bone healing issues, and/or worsening pain. Our promise is that we will not stop working with you until we maximize your return to function, gainful work, and minimize pain.

**SHOWERING**: You may shower with soap and water 1 day after surgery. Avoid lotions, creams, or antibiotic ointments on surgical site until directed by your orthopaedic surgeon. No baths or submerging operative site under water until incision has completely healed.

SKIN CARE: Steristrips are typically placed on your incision at your follow up appointment. Steristrips will typically fall off on their own. Remove steristrips in shower after 3 weeks if they remain on incision. Incisions may become sensitive. Some surgical incisions based on their location and patient factors are more likely to require postoperative scar desensitization with physical therapy. You may use Mederma or other skin protectant lotion once incisions have completely healed and approved by your orthopaedic surgeon. Do not placed cortisone or other steroid on your incision unless directed by your orthopaedic surgeon. Incisions and surgical site scars are more prone to burn by ultraviolet radiation when out in the sun. Always apply sun screen onto the healed incision once fully healed.

**STOOL SOFTENERS**: While on narcotic pain medication (e.g. Norco/hydrocodone or Percocet/oxycodone) especially within first 72 hours of surgery, you should take stool softener (e.g. Miralax, docusate, senna). Discontinue if you develop loose stool or diarrhea.

#### **REFERENCES**

1. Knee Arthroscopy Exercise Guide. OrthoInfo. AAOS 2000