

## Sports Injury and Joint Replacement Surgery for the Hip and Knee

# KNEE ARTHROSCOPY POST-OPERATIVE PROTOCOL

### General Guidelines

- Knee arthroscopies are usually performed on day-only basis
- Knee arthroscopies performed with meniscal repair defer to ROM and weight bearing precautions outlined in the meniscal repair protocol.
- Supervised physical therapy can be commenced immediately post-operatively.
- Braces are not routinely used, however, may be necessary depending other injuries or surgery performed.

### White compression stockings

You may stop wearing the white compression stockings after 24-48 hours. This compression stocking helps prevent a blood clot from forming in your legs. Once you are walking frequently you will no longer need the stocking. If you develop lower leg swelling, tenderness, and/or redness, please contact Dr Awwad's office or the hospital.

### Dressings

The bulky encircling dressings (crepe bandage, velband and pads) may be removed the day after surgery. The small adhesive dressings should be left intact. To shower, cover the surgical knee and dressings with plastic cling wrap. Prior to discharge from hospital, an appointment will be made to see a nurse for a dressing change and wound check between 1-2 weeks post-operatively.

### Ice and Elevation

The leg should be intermittently elevated and an ice pack used for 72 hours post-operatively to assist with swelling and pain. Ice packs should be applied for 20-30mins/hr. After 72 hrs, ice packs are no longer required, although can be safely continued and their use is very helpful for pain and swelling.

### Pain Medications

The anaesthetist will individualise and organise the appropriate pain relief for patients. Commonly required medication are panadeine forte, tramadol, palexia and endone.

The routine use of anti-inflammatories is not recommended post-operatively, unless directed by Dr Awwad.

### General Progression of Activities of Daily Living

- Driving may commence 24 hrs after surgery and if not taking strong pain killers
- Weight-bearing as tolerated immediately post-op
- Crutches are not usually required.
- Return to work as directed by Dr Awwad based on work demands.

### Normal Expectations

- It is normal to have moderate pain and swelling post surgery.
- The sensation of swooshing or squishing on movement of the knee for 3 days post operatively is also normal

### Precautions

Patients should contact Dr Awwad's office or the hospital the operation was performed in, if they develop high temperatures, worsening skin redness, worsening calf, knee or thigh pain and swelling and excessive bleeding or ooze from the incision sites.

### Exercise

- The exercise programme outlined on the following pages can be safely followed to maintain range of motion and muscle strength in the recovery period post-operatively. Progression from Initial to Intermediate to the Advanced exercises should proceed when the formed programme is mastered with ease.

## Initial Exercise Program

### 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

Repeat 10 times.

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.



### Straight Leg Raises

Repeat 10 times.

Lie on your back, with uninjured knee bent, straighten your involved knee. Slowly lift about 15cm and hold for 5 seconds. Continue lifting in 15cm increments, hold each time. Reverse the procedure, and return to the starting position.

Advanced: Before starting, add weights to your ankle, starting with 0.5kg of weight and building up to a maximum of 2.5kgs of weight over 4 weeks.



### 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.

Advanced: Before starting, add weights to your ankle, starting with 0.5 kg of weight and building up to a maximum of 2.5kg of weight over 4 weeks.



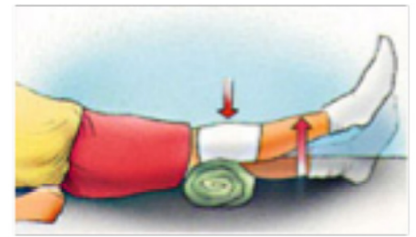
## Intermediate Exercise Program

### 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 0.5kgs of weight and building up to a maximum of 2.5 kgs of weight over 4 weeks.

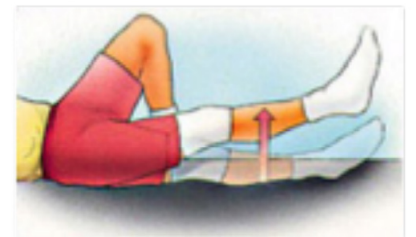


### Straight Leg Raises

Perform 5 sets of 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.

Advanced: Before starting, add weights to your ankle, starting with 0.5 kgs of weight and building up to a maximum of 2.5 kg 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.



### Quadriceps Stretch, Standing

Repeat 10 times.

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



## Advanced Exercise Program

### Knee Bend, Partial, Single Leg

Repeat 10 times.

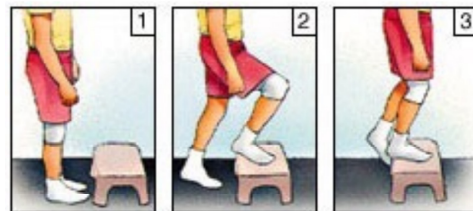
Stand supporting yourself with the back of a chair. Bend your uninjured leg with your toe touching for balance as necessary. Slowly lower yourself, keeping your foot flat. Do not overdo this exercise. Straighten up to the starting position. Relax.



### Step-ups, Forward

Repeat 10 times.

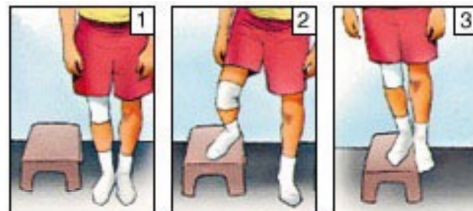
Step forward up onto a 15cm high step, leading with your involved leg. Step down, returning to the starting position. Increase the height of the platform as strength increases.



### Step-ups, Lateral

Repeat 10 times.

Step up onto a 15cm high step, 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 your hip a little more, and repeat.

No bouncing! Maintain a steady, prolonged stretch for the maximum benefit.



# Advanced Exercise Program

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## 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

Start pedalling 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 pedalling 20 minutes a day.

## Walking

An excellent physical exercise activity in the middle stages of your recovery from surgery (after 2-4 weeks). If you have increasing pain after walking long distances, it is best to rest the knee.

## Running

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. Running or power walking should be ceased if there is increasing pain or swelling on the commencement of the activity.



### Dr George Awwad

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APPOINTMENTS AND ENQUIRIES

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Ask **Dr Awwad** to clarify your restrictions prior to surgery to avoid disappointment.