

## Post Op Phase 1 - Range of movement

These exercises should be performed in a pain-free range. Do 10 repetitions of each exercise, 3 times per day.

### Ankle dorsiflexion and plantarflexion

This can be done in a sitting or lying position. Point your toes as far as they can go. Then bring your toes back up towards you.



### Heel slides

Begin with a straight leg, lying on your back. Bring your foot up towards your bottom by bending your knee. Use a scarf or towel to assist you if you cannot reach with your hands. Try to increase the bend in the knee.



### Knee extension

1) Sit with your operated leg out in front of you. Push down on your thigh to try to straighten the knee.



2) Rest your foot onto a stool or chair. Allow your knee to drop down into a straightened position. It may be helpful to add weights by putting a bag weighted down with a few tins on each side of the knee. Use a towel to protect the skin. You could also prop your heel onto a cushion to encourage the knee to drop down.



## Post Op Phase 1 - Stretches

These are the basic stretches. Your physiotherapist can modify the exercises for you if the positions are uncomfortable. Try to hold each stretch for 30 seconds. If balance is difficult in the standing postures, please hold onto a stable surface or the wall.

### Hip flexors

1) Whilst standing, bend one knee to take your heel to your bottom. Hold your foot with your hand or a scarf if you cannot reach. Your knees should stay together. Be careful not to arch your back.



2) Adopt a stance (lunge) position. Bend the front knee. Keeping the back knee straight push your weight to the front so that the knee bends more until you feel a stretch at the front of the back hip.

### Gluteal stretches

Lying on your back with your knees bent, cross one foot onto the opposite knee. Put your hands behind the leg on the floor and pull your thigh towards you. Both feet should now be off the ground. Use a scarf to assist you if you cannot reach with your hands.



### Hamstring stretch

Begin by lying on your back with both knees bent and your feet on the floor. Reach behind one thigh and pull this leg towards you with a straightened knee. You can use a towel if you cannot reach with your hands. You should feel the stretch at the back of the straight leg.

### Adductor stretch

Stand facing forwards with your feet apart, bend one leg and lean to that side. You should feel the stretch on the inner thigh of the straight leg.



## Post Op Phase 1 - Strengthening

Do 10 repetitions of each exercise, 3 times per day.

### Static quads

Lie on your back. Straighten one leg. Pull your toes towards you and push your knee into the floor/bed. Hold for 5-10 seconds.



### Straight leg raise

Lie on your back. Straighten one leg. Pull your toes towards you and lift the leg a few inches from the floor. Hold for 5-10 seconds.



### Inner range quads

Place a rolled up towel underneath your knee. Pull your toes towards you and push your knee into towel. Your heel should lift off the floor. Hold for 5-10 seconds.



### Bridging

Lie on your back with your knees bent and your feet flat on the floor, hip width apart. Rest your arms by your sides or on your abdominal muscles. Push through your heels to lift your bottom. This exercise can be progressed by lifting one foot off the floor to straighten the knee after 2 weeks - ONLY if good technique is achieved with the basic exercise.



## Post Op Phase 1 - Strengthening continued

### Side-lying abduction

Lie on your side with the bottom leg bent for stability. Keeping the top leg straight, lift it up towards the ceiling and back down again.



### Clam

Lie on your side with your top leg on top of the bottom leg. Your knees should be flexed to 90°, hips 45°. Breathe out as you open your knees. Breathe in to lower back down. Your spine should remain in the neutral spine position and the movement restricted to the lower half of your body only.



### Heel digs

Sitting on a chair, dig one heel at a time into the ground maintaining a bent knee. Hold for 5-10 seconds.



### Hamstring curls **AFTER 6 WEEKS**

Lie on your tummy. Bend one leg to take the heel to your bottom. Return to the neutral position.



## Post Op Phase 1 - Strengthening continued

## Heel raises

Stand on your tip-toes then lower back down.



## Step ups/downs

Technique is extremely important - perform in front of a mirror if possible. Practise stepping up and down from a box or step. Ensure that the angle of bend at your knees remains within the range of 0-60°.



**Check with your Physiotherapist before starting this exercise.**

## Squats

Start with your feet hip width apart. Your toes should be facing forwards and be in front of the knee. Move as if you are going to sit down (move a few inches only). Return to the start position.



Ensure that the angle of bend at your knees remains within the range of 0-60°.

**Check with your Physiotherapist before starting this exercise.**



## Leg extensions

Sitting in a chair, raise your leg up to 45° (from week 4). Each week you can progress the movement by 10°. Check with your Therapist if you are unsure.

## Post Op Phase 1 - Core Exercises

### Transversus abdominus (TrA)

Lie on your back with your knees bent. Rock your pelvis back and forth to flatten your back against the floor and then arch your back to create space between your back and the floor (keeping your bottom on the floor). Find the mid point between these two movements. This is your “neutral spine” and should be the start position of your back for all core exercises. Place your fingertips on your hip bones at the front and move them down and in 1 inch. Take a normal breath in and on the breath out contract your lower tummy. It is important that you do not hold your breath or brace yourself. Hold the contraction for 5 seconds, continuing to breathe in and out.



This exercise is the basis for all the core exercises. Repeat each movement 10-15 times.

### Hip twist

Start in the neutral spine (as above). Breathe in to prepare. Breathe out as you take one knee out to the side. Breathe in as you return to rest position. Aim to keep your back in the neutral position and do not allow your hip to drop as you move the leg. Maintain contraction of the TrA muscle.



### Heel slides

Start in the neutral spine position. Breathe in to prepare. Breathe out as you slide one heel away from the body. Breathe in and return the leg to the start position. Alternate the legs. Add in reciprocal arm movements to progress. Continue to contract the TrA muscles during the movement.



### Scissors

Start in the neutral spine position. Breathe in to prepare. Breathe out as you lift one leg, keeping the knee and the hip bent to 90°. Alternate the legs, whilst contracting the TrA.



## Post Op Phase 1 - Core Exercises continued

### Abdominal curls/full sit up

Lie on your back with your knees bent and feet hip width apart. Rest your hands lightly behind your head or crossed on your chest. Your neck should be slightly flexed. Breathe out as you use your abdominal strength to curl your upper body off the floor until you are in a semi-seated position. Breathe in as you lower back down.



### Mini crunches

Lie on your back with your knees bent and feet hip width apart. Rest your hands lightly behind your head or crossed on your chest. Breathe out as you lift only your head and shoulders from the floor to feel your abdominal muscles contract. Keep your neck straight and avoid pulling your head forwards. Breathe in as you lower back down.



### Russian twists

Create a V shape with your body by sitting up and lifting your legs into the air. Cross your feet over each other. Clasp your hands together and rotate your arms to each side, twisting your upper body as you go.



## Post Op Phase 2 - Strengthening



### Squats

Start with your feet hip width apart. Your toes should be facing forwards and be in front of the knee. Move as if you are going to sit down (move a few inches only). Return to the start position.

You can now increase the angle at the knee to full range of movement.

### Single leg squats

Stand on one leg. Keeping your knee behind the line of your toes, move as if you are going to sit down (move a few inches only). Return to the start position.



### Lunges

Take a stance position. With both knees bent, take your midline down a few inches towards the floor. Ensure good alignment is maintained. Return to the start position.

These can be progressed by adding movement e.g. stepping forwards/backwards and adding free weights once you move to phase 3.

### Leg extensions

Sitting in a chair, raise your leg up to fully straight.





## Post Op Phase 2 - Core Exercises

### 4 point kneel with leg/arm extension

Start on your hands and knees. Begin by taking one leg at a time out to straighten the hip and knee. Repeat on the other side. The aim is to keep your back as level as possible throughout the movement. Progress by adding the opposite arm movement to the leg movement. Imagine you have a glass of water on the small of your back.



### Plank

Place your forearms on the ground with your elbows directly underneath the shoulders. Keeping your knees straight, come up onto your toes. Goal - hold the position for one minute. Avoid the back dropping! Progression - Rise up onto the hands.



### Side plank

Lie on your side with your knees straight. Rest your upper body on your forearm. Raise your hips to lift off the ground. Goal - hold for one minute.

Plank variations - add an unstable surface, lift one leg, rotate.