

Pre-Operative Knee Physical Therapy Exercises

For The Active Individual

Please Note:

Sets and repetitions are based on low intensity guidelines. The below exercises are appropriate for immediate pre-operative care for knee surgical interventions.

Lower Extremity Stretching

These stretches are safe to perform following to surgery in a pain-free range



HAMSTRING STRETCH WITH TOWEL/STRAP

While lying down on your back, hook a towel or strap under your foot and draw up your leg until a stretch is felt along the backside of your leg. Ensure opposite knee is bent and that your knee on the leg being stretched is in a straightened position.

3 sets, 30 second hold, 1-2x/day



SINGLE KNEE TO CHEST STRETCH

While lying on your back, hold your knee and gently pull it up towards your chest. Keep opposite knee bent.

3 sets, 30 second hold, 1-2x/day



PIRIFORMIS STRETCH

While lying on your back, hold your knee with one hand and your ankle with the other. Pull your leg up and over towards the opposite shoulder as shown.

3 sets, 30 second hold, 1-2x/day

**Perform as tolerated as pain allows*



CALF STRETCH WITH TOWEL – GASTROCNEMIUS

While in a seated position, place a towel around the ball of your foot and pull your ankle back until a stretch is felt on your calf area. Keep your knee in a straightened position during the stretch.

3 sets, 30 second hold, 1-2x/day

ROM Exercises

These range of motion exercises are safe to perform following surgery in pain free range.



HEEL SLIDE

Using a rigid strap, slowly pull your knee towards you until a gentle stretch is felt.

1 set, 10 repetitions, hold 10 seconds, 1-2x/day

***Note any ROM restrictions following knee surgery, consult physician or PT for guidance*

Knee/Hip/Core Strengthening

These strengthening exercises are safe to perform following your knee surgery in a pain-free range.



ABDOMINAL BRACE

Laying on your back with your knees bent, draw in your belly button as if putting on a tight pair of pants. It should feel like you are flattening or pushing your back into the table/bed. This can be performed with your legs straight depending on how far you can comfortably bend your knee.

3 sets, 10 repetitions with 10 second hold, 1-2x/day



STRAIGHT LEG RAISE - SLR

While lying on involved side raise top leg up towards ceiling without allowing top hip to roll backwards. Keep body in one straight line from head to toe.

3 sets, 10 repetitions, 1-2x/day



STRAIGHT LEG RAISE ABDUCTION

While lying on involved side raise top leg up towards ceiling without allowing top hip to roll backwards. Keep body in one straight line from head to toe.

3 sets, 10 repetitions, 1-2x/day



BRIDGING

While lying on your back with knees bent, tighten your lower abdominals, squeeze your buttocks and then raise your buttocks off the floor/bed as creating a "Bridge" with your body. Hold and then lower yourself and repeat.

3 sets, 10 repetitions 3 second hold, 1-2x/day



LONG ARC QUAD

While seated with your knee in a bent position, slowly straighten your knee as you raise your foot upwards as shown. Ensure core muscles are activated.

3 sets, 10 repetitions, 1-2x/day



HEEL RAISE

Standing with your feet hip width apart, squeeze quad and glute musculature and raise up on your toes. Pause, then lower slowly.

3 sets, 10 repetitions 10 second hold, 1-2x/day



SQUAT

Standing with feet hip width apart, sit your hips back and squat down. Do not go lower than 90 degrees and ensure your knees do not go over your toes.

3 sets, 10 repetitions, 1-2x/day



3 WAY LEG SWING

Standing on one leg with core tight and slight bend in stance leg, move your leg forward, out to the side, and backwards. Be sure to engage your quad and glute on both legs to maintain a straight leg position. Do not arch your back when bringing your leg behind you.

3 sets, 10 repetitions each direction, 1-2x/daily