

OCATs

NHS

North Cheshire and Mersey

NHS Foundation Trust

Musculoskeletal Physiotherapy OCATs

Health Services at Wolves

Post Op Knee Strengthening Exercises

Guidance

- You have been provided with these exercises to help improve your Knee function following surgery.
- These Exercises are intended to assist with Strengthening for your Knee through the rehabilitation process.
- These exercises are intended as a guide and prior to starting you should have had some instruction from your physiotherapist at OCATS.
- The sets and reps outlined in this leaflet are intended as a guide – you may wish to do less or more, but can progress these at your own pace.
- If you experience worsening symptoms while completing the exercises you may want to seek guidance from your physiotherapist.
- Progress at your own pace, as your pain/stiffness allow, under the supervision/guidance of your physiotherapist at OCATS.

Knee Extension in Sitting



**Repeat 6-10 reps
x 4 sets**

Sit up tall on a chair with a back support.

Pull your toes up towards your shin.

Slowly straighten your leg by tightening the muscles in your thigh.

Hold at the top of the movement for 3-5 seconds squeezing your thigh muscle.

Slowly return back to the starting position in a controlled manner.

Knee Extension in Sitting with Resistance Band



**Repeat 6-10 reps
x 4 sets**

Tie a resistance band around a chair leg or equivalent then loop the band around your toes to prevent the band sliding up and down your ankle.

Sit up tall on a chair with a back support.

Pull your toes up towards your shin.

Slowly straighten your leg by tightening your thigh muscles.

Hold at the top of the movement for 3-5 seconds squeezing your thigh muscle.

Slowly return back to the starting position in a controlled manner.

Mini Squats



Stand in front of a table or chair holding on for support with both hands.

Stand with feet shoulder width apart, your toes pointing slightly outwards at 10 to 2 position (Imagine a clock).

Keeping your head up and back straight, tighten your deep core muscles then slowly squat down sticking your bottom out.

Don't worry about going too low initially; your movement, depth and confidence when performing this exercise will improve gradually overtime.

Repeat 10 reps x 4 sets

Sit to Stand 1-2 Sec Pause



Stand with feet shoulder width apart with your toes pointing slightly outwards at 10 to 2 position (Imagine a clock).

Keeping your head up and back straight; tighten your deep core muscles then slowly squat down sticking your bottom out.

Pause on the chair for 1-2 seconds then return to the starting position without locking your knees out.

Repeat 10 reps x 4 sets

Sit to Stand with Bottom Touch 'Tapping' Only



Stand with feet shoulder width apart with your toes pointing slightly outwards at 10 to 2 position (Imagine a clock).

Keeping your head up and back straight; tighten your deep core muscles then slowly squat down sticking your bottom out.

Try to ensure you are driving your knees outwards - don't let your knees collapse inwards.

Touch the chair with your bottom without sitting down. Then return to the starting position without locking your knees out at the top of the movement.

Repeat 10 reps x 4 sets

Sit to Stand Squat Holding Weight or Kettlebell



**Repeat 6-10 reps
X 4 sets**

Stand with feet shoulder width apart with your toes pointing slightly outwards at 10 to 2 position (Imagine a clock).

Hold a Kettlebell / Dumbbell or equivalent close to your chest with your elbows tucked into your side.

Keeping your head up and back straight; tighten your deep core muscles then slowly squat down sticking your bottom out keeping your back straight and head up.

Then return to the starting position without locking your knees out.

Start off squatting to a chair initially for confidence then progress to no chair as you feel able.

Hip “Out” Abduction Holding onto Chair



Hold onto work surface / chair or equivalent.

Point your toes up towards your shin. Keep your leg completely straight.

Raise your leg out sideways, hold for 2 seconds at the end of the movement, then slowly return to the starting position.

Be careful you're not leaning sideways and using your back muscles – only your hip, bum and outside thigh muscles should be working during this exercise.

**Repeat 10 reps
x 4 sets**

Hip “Out” Abduction with Resistance Band



Hold on to work surface / chair or equivalent.
Put the Theraband around your ankles, this may be easier to do in sitting if you find it hard to balance.
Point your toes up towards your shin.
Keep your leg completely straight.
Raise your leg out sideways, hold for 2 seconds at the end of the movement, then slowly return to the starting position.
Be careful you're not leaning sideways and using your back muscles – only your hip, bum and outside thigh muscles should be working during this exercise.

**Repeat 10 reps
x 4 sets**

Standing Double Calf Raise



Using a chair, work surface or wall for support.
Start with your feet flat on the floor.
Push up on your toes in Standing - lifting your heels off the floor.
Hold for 2 seconds at the top of the movement.
Slowly return back to the starting position

**Repeat 6-10 reps
x 3 sets**

Forward Lunge Holding on with Finger Tips



**Repeat 6-10
X 4 sets**

Start with your feet together.

Using a work surface / chair or equivalent for support as needed.

Lunge one leg forward with your toes facing outwards driving your knee outwards over your middle toes.

Try to be soft on your feet and not let your knee collapse inwards.

Push back to starting position (both feet together) in a spring like motion.

Gradually progress the depth and stride length of the lunge as you get stronger and more confident.

Double Leg Bridge

Lying on your back with your knees bent up, keeping your feet flat on the floor or bed. Make sure your feet and knees are shoulder width apart (do not have your feet and knees together).

Try to get your feet as close to your bum as comfortable.

Contract your core muscles and squeeze your bum muscles, then lift your bum off the floor.

Hold this position at the top of the movement for 2 seconds then slowly lower down to the starting position.



Repeat 10 reps x 4 sets

Single Leg Balance Exercise

Stand on one leg and try to balance gripping your toes into the floor.

Hold onto a chair or work surface with finger tips for support if necessary.

Hold this position for 20-30 seconds each leg.

Do this as often as you can throughout the day e,g when washing up, waiting for kettle to boil, brushing teeth, making tea, at work or whenever you get the opportunity.



Complete this little and often throughout the day



Single Leg Balance – Uneven Surface/ Without Holding On

Stand on one leg trying to balance gripping your toes into the floor. If you can - try to do this without holding on.

For safety and confidence you can stand next to a work surface or chair for support.

Balance for 20-30 seconds each leg.

To make this harder you can attempt this exercise on a folded towel/ cushion to create a slightly unstable surface challenging your balance further.

Do this as often as you can throughout the day e,g washing up, waiting for kettle to boil, brushing teeth, making tea, at work or whenever you get the opportunity.

**Complete this little and
often throughout the day**

Final thoughts

- If you feel unwell or the exercises cause significant pain, please stop and rest. If this continues discuss it with your physiotherapist.
- If you have any questions or concerns about any of the information detailed in this leaflet please contact the department using the following details.