



Hampshire Hospitals
NHS Foundation Trust

Department of Trauma & Orthopaedic Surgery

Advice and exercises for before and after your total knee replacement

Information for patients, relatives, and carers

Exercises to do BEFORE your knee operation

1. Heel slide

- Lying on your back, start with your leg resting flat on the bed.
- Slowly bend your knee, sliding your foot towards your bottom. Expect to feel a stretch over the front of the knee.
- Hold for three seconds.
- Gently slide your heel back down. Make sure that your knee returns to a fully straightened position after each repetition.



Aim to do this exercise 10 times, twice a day.

2. Inner range quads

- Place a rolled-up towel underneath your knee.
- Keeping the back of your knee resting on the towel, pull your toes up towards you.
- Slowly lift your foot up until your knee is as straight as possible.
- Hold for three seconds.
- Slowly lower your foot back down to the bed.



Aim to do this exercise 10 times, twice a day.

3. Heel prop

- Rest your heel on a rolled-up towel, making sure that your calf is raised off the bed. Lie down and relax.
- Your knee will hang under its own weight, stretching the muscles at the back of your knee.
- This may be uncomfortable at first, so start off doing this exercise for two to three minutes and aim to gradually increase to 10 minutes.
- To stretch further, gently contract (squeeze) the muscles on the front of your knee every few minutes, pushing the back of your knee towards the bed.



Start with two to three minutes, aiming to build up to 10 minutes, twice a day.

4. Knee extension stretch

- Sit upright with your legs outstretched.
- Wrap a belt or dressing gown cord around the foot of your operated leg and hold onto the ends with your hands.
- Slow pull the belt/cord so that your heel lifts up and off the bed, while keeping the back of your knee flat on the bed.



Aim to do this exercise 10 times, twice a day.

5. Seated knee extension

- Sit upright on the edge of a bed or chair.
- Slowly lift the foot of your operated leg until your knee is full straightened.
- Slowly drop your foot back down, allowing your knee to bend. If possible, try to bend your knee so that your foot goes slightly under the chair or bed.



Aim to do this exercise 10 times, twice a day.

6. Patella (kneecap) mobilisation

- Sit upright with your legs straight out in front of you.
- Grip your kneecap (patella) between your index fingers and gently move it from side to side.

Please note that it may feel odd to begin with and there may not be much movement at first.

Aim to do this exercise between five and 10 times, twice a day.

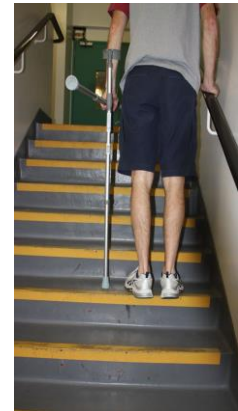


Stairs

Try to practice going up and down stairs with your crutches **before** your operation.

Going upstairs

- Use one crutch as normal, keeping it in contact with the floor. Use the same hand to grasp the second crutch in a T shape. Hold onto the stair rail (bannister) with your other hand.
- Place the foot of your good (non-operated) leg onto the step above.
- Bring your bad (operated) leg up to join it.
- Then bring your crutches on to the same step as your feet.
- Repeat until you reach the top.



Going downstairs

- Use one crutch as normal, keeping it in contact with the floor. Use the same hand to grasp the second crutch in a T shape. Hold onto the stair rail (bannister) with your other hand.
- Place your crutch onto the step below.
- Place the foot of your bad (operated) leg onto the step below.
- Bring your good (non-operated) leg down to join it.
- Repeat until you reach the bottom.



Exercises to do AFTER your knee operation (first two weeks)

7. Heel slide

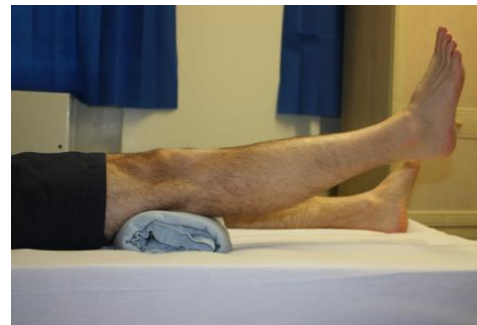
- Lying on your back, start with your leg resting flat on the bed.
- Slowly bend your knee, sliding your foot towards your bottom. Expect to feel a stretch over the front of your knee.
- Hold for three seconds.
- Gently slide your heel back down. Make sure that your knee returns to a fully straightened position after each repetition.



Repeat this exercise 10 times, three times a day.

8. Inner range quads

- Place a rolled-up towel underneath your knee.
- Keeping the back of your knee resting on the towel, pull your toes up towards you.
- Slowly lift your foot up until your knee is as straight as possible.
- Hold for three seconds.
- Slowly lower your foot back down to the bed.



Repeat this exercise 10 times, three times a day.

9. Heel prop

- Rest your heel on a rolled-up towel, making sure that your calf is raised off the bed. Lie down and relax.
- Your knee will hang under its own weight, stretching the muscles at the back of your knee.
- This may be uncomfortable at first, so start off doing the exercise for two to three minutes and aim to gradually increase to 10 minutes.
- To stretch further, gently contract the muscles on the front of your knee every few minutes, pushing the back of your knee towards the bed.



Start with two to three minutes, aiming to build up to 10 minutes, twice a day.

10. Knee extension stretch

- Sit upright with your legs outstretched.
- Wrap a belt or dressing gown cord around the foot of your operated leg and hold onto the ends with your hands.
- Slowly pull the belt/cord so that your heel lifts off the bed, while keeping the back of your knee flat on the bed.



Repeat 10 times, three times a day.

11. Seated knee extension

- Sit upright on the edge of a bed or chair.
- Slowly lift the foot of your operated leg until your knee is fully straightened.
- Slowly drop your foot back down, allowing your knee to bend. If possible, try to bend your knee so that your foot goes slightly under the chair or bed.



Repeat this exercise 10 times, three times a day.

12. Patella (kneecap) mobilisation

- Sit upright with your legs straight out in front of you.
- Grip your kneecap (patella) between your index fingers and gently move it front side to side.

Please note that it may feel odd to begin with and there may not be much movement at first.

Repeat five to 10 times, twice a day.



Exercises to do AFTER your knee operation (weeks two to six)

We will advise you when to start doing these exercises. Please note that you should also continue to do exercises 7 to 12, three times a day.

13. Single leg balance

- Stand up and hold on to a chair for support.
- Slowly lift your non-operated leg off the floor, so that you are balancing on your operated leg.
- If you feel that you can balance, let go of the chair you are holding on to.
- Balance in this position for as long as you can manage.
- If you feel you are losing your balance, hold on to the chair again. Slowly lower your leg back down to the starting position.



Repeat this exercise five times, three times a day.

14. Quarter squat

- Stand with your knees shoulder-width apart.
- Bend both of your knees, squatting, as if you are going to sit down.
- Hold this position for a few seconds before slowly returning to standing upright.
- Make sure that your knees bend straight over your toes, rather than turning in or out.



Repeat this exercise five times, three times a day.

15. Single leg squat

- You will need a small step for this exercise. For example, the bottom step of your stairs at home, or a thick book (as long as it is safe to stand on).
- Holding onto a nearby support (such as a stair rail), stand on the step with your operated leg and straighten your knee.
- Bend your knee, gently squatting, so that your other leg just touches the floor with your toes.
- Straighten your knee, lifting that foot back off the floor.



Repeat this exercise five to 10 times, three times a day.

Exercises to do from six weeks to six months after surgery

You should do these exercises every day.

16. Seated knee extension

- Sit upright on the edge of a bed or chair.
- Slowly lift the foot of your operated leg until your knee is full straightened.
- Slowly drop your foot back down, allowing your knee to bend. If possible, try to bend your knee so that your foot goes slightly under the chair or bed.



Repeat this exercise 10 times, three times a day.

17. Single leg balance

- Stand up and hold on to a chair for support.
- Slowly lift your non-operated leg off the floor, so that you are balancing on your operated leg.
- If you feel that you can balance, let go of the chair you are holding on to.
- Balance in this position for as long as you can manage.
- If you feel you are losing your balance, hold on to the chair again. Slowly lower your leg back down to the starting position.



Repeat this exercise five times, three times a day.

18. Quarter squat

- Stand with your knees shoulder-width apart.
- Bend both of your knees, squatting, as if you are going to sit down.
- Hold this position for a few seconds before slowly returning to standing upright.
- Make sure that your knees bend straight over your toes, rather than turning in or out.

Repeat this exercise five to 10 times, three times a day.



19. Single leg squat

- You will need a small step for this exercise. For example, the bottom step of your stairs at home, or a thick book (as long as it is safe to stand on).
- Holding onto a nearby support (such as a stair rail), stand on the step with your operated leg and straighten your knee.
- Bend your knee, gently squatting, so that your other leg just touches the floor with your toes.
- Straighten your knee, lifting that foot back off the floor.

Repeat this exercise five to 10 times, three times a day.



From six months after surgery

Unless we have advised you otherwise, continue doing the previous exercises (16, 17, 18 and 19) two to three times a week for the lifetime of your knee replacement.

Contact us

If you have any questions, problems or need advice once you are at home, please do not hesitate to contact us on one of the numbers below.

Basingstoke and North Hampshire Hospital

- Orthopaedic education and follow-up clinic
Telephone: [01256 313580](tel:01256313580)
- Orthopaedic ward (D5)
Switchboard: [01256 473202](tel:01256473202) then ask for the Elective Orthopaedic Ward
- Basingstoke Orthopaedic Therapy services (occupational therapy and physiotherapy)
Telephone: [01256 313205](tel:01256313205)

Royal Hampshire County Hospital

- Winchester Elective Orthopaedic Ward Switchboard: [01256 863535](tel:01256863535), then ask for the Elective Orthopaedic Ward
- Winchester Orthopaedic Therapy Services (occupational therapy and physiotherapy)
Telephone: [01962 825670](tel:01962825670)

If you are treated for a DVT (blood clot) or prescribed antibiotics for problems with your wound, please contact the orthopaedic joint review clinic for advice on [01256 313580](tel:01256313580)

Your feedback is important to us

Comments, concerns, compliments, and complaints

If you have any comments, concerns, compliments, or complaints about your care, please let us know as soon as possible. Please speak to the nurse in charge, ward sister or matron so that we can help to resolve your concerns quickly.

PALS and complaints

You can contact the PALS and complaints team by telephone on [01256 486766](tel:01256486766) or via email at PALSandcomplaints@hhft.nhs.uk

This booklet is available in other formats, including large print and Easy Read, from the PALS team.

www.hampshirehospitals.nhs.uk