

## Physiotherapy exercises following transtibial (below knee) amputation

### What is it?

This sheet has been designed to help you remember the exercises that you have been taught by your physiotherapist following a transtibial (below knee) amputation.

### What are the potential risks and side effects?

All of the exercises should be done slowly and smoothly. If you feel any pain, stop and tell your physiotherapist or doctor.

### What are the expected benefits of treatment?

Exercise helps to keep your strength and mobility as well as improve your blood flow.

These exercises will help to keep you independent either in a wheelchair or using an artificial leg (prosthesis). Try to keep doing these exercises, even after you have been discharged from treatment.

### 1. Static Quadriceps

- Push your legs straight out in front of you.
- Push the back of your knees into the bed and tighten the thigh muscles.
- Hold for five seconds.
- Repeat this \_\_\_\_ times.



## 2. Straight Leg Raise

- Put your legs out in front of you.
- Tighten your thigh.
- Lift your leg off the bed.
- Hold for \_\_\_\_ seconds.
- Slowly lower.
- Repeat \_\_\_\_ times.



Repeat the above with the other leg.

## 3. Inner Range Quads

- Sit with both legs straight out in front of you.
- Place a rolled up towel, blanket or pillow under your knee.
- Straighten your knee.
- Hold for five seconds.
- Repeat \_\_\_\_ times.



Repeat the above with the other leg.

#### 4. Hip Adduction With Resistance

- Sit with both legs out in front of you.
- Place a pillow or rolled up towel between your knees.
- Squeeze your legs together.
- Hold for five seconds.
- Repeat \_\_\_ times.

NB: This exercise can also be performed when sitting in a wheelchair or at the edge of a bed.



#### 5. Outer Range Quadriceps

- Sit on a chair or edge of the bed. Place your hands on your lap.
- Straighten one knee.
- Hold for five seconds.
- Now bend your knee.
- Repeat \_\_\_ times.



Repeat the above with the other leg.

## 6. Static Gluteal Contractions

- Lie on your back.
- Keep both legs straight and close together.
- Squeeze your buttocks as tightly as possible.
- Hold for five seconds.
- Repeat \_\_\_ times.



## 7. Hip Flexor Stretch

- Lie on your back, preferably without a pillow.
- Bend your knee towards your chest and hold with your hands.
- Push your opposite leg down flat on to the bed.
- Hold for 30 to 60 seconds, then relax.
- Repeat \_\_\_ times.



Repeat the above with the other leg.

## 8. Bridging

- Lie on your back with your arms at the side.
- Place a couple of firm pillows or rolled up blankets under your thighs.
- Pull in your stomach, tighten your buttocks and lift your bottom up off the bed.
- Hold for five seconds.
- Repeat \_\_\_ times.



To make this exercise more difficult, place your arms across your chest as shown in the picture.

## 9. Hip Flexion and Extension in Side Lying

- Lie on your side.
- Bend the bottom leg.
- Lift your top leg slightly.
- Bend your knee fully towards your chest.
- Straighten your knee and push your leg backwards.
- Repeat \_\_\_ times.

NB: Try not to let your hips roll forwards or backwards.

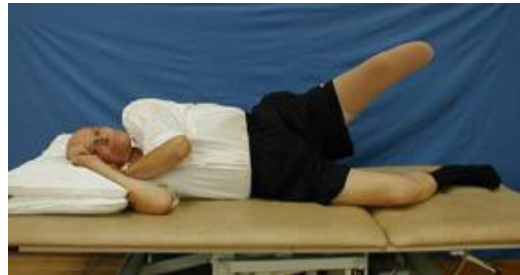


Repeat the above with the other leg.

## 10. Hip Abduction in Side Lying

- Lie on your side.
- Bend the bottom leg.
- Keep hips and top leg in line with your body.
- Slowly lift your top leg up, keeping your knee straight.
- Slowly lower.
- Repeat \_\_\_ times.

NB: Try not to let your hips roll forwards or backwards.



Repeat the above with the other leg.

## 11. Knee Flexion in Prone Lying

- Lie on your stomach.
- Place your arms in a comfortable position.
- Keeping your thigh on the bed, bend your knee as far as possible.
- Hold for five seconds.
- Straighten your knee.
- Repeat \_\_\_ times.



Repeat the above with the other leg.

## Consent

Although you consent for this treatment, you may at any time after that withdraw such consent. Please discuss this with your physiotherapist.

## Sources of information

This exercise sheet has been produced by representatives of the Physiotherapy Inter Regional Prosthetic Audit Group (PIRPAG).

## Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

## Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: 0300 131 4731 (direct dial) or by email at: [esh-tr.patientexperience@nhs.net](mailto:esh-tr.patientexperience@nhs.net)

## Hand hygiene

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After reading this information if there are any questions please ask your physiotherapist.

## Reference

The following clinicians have been consulted and agreed this patient information: Rachel Chambers, Team Lead Physiotherapist Vascular Services - Lynsey Arnold, Team Lead Physiotherapist Vascular Services. The Out Of Hospitals directorate group that have agreed this patient information leaflet:

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