

# Below Knee Ilizarov Exercises

## Trauma and Orthopaedics

### Calf stretch

Sit on a bed or chair with your leg out in front of you. Place a towel or bandage around the ball of your foot and hold either end of towel with your hands. Pull towards you.

*Hold for 30 seconds and repeat 3 times.*

*You should feel a stretch in your calf*



### Plantarflexion stretch

Sit on a bed or chair with your leg out in front of you. Place your un-operated foot on top of the operated foot and push down until you feel a stretch at the front of your foot.

*Hold for 30 seconds and repeat 3 times.*



### Straight leg raise

Sitting on a bed or in a chair (with your foot up on a stool) lift your operated leg a few inches off the bed/chair. Hold for 3 seconds and return to the starting position.

*Repeat this up to 10 times.*



### Bridge

Lie on your back with your knees bent, feet hip width apart and arms down by your side. Tighten your buttock muscles and lift your bottom off the floor, slowly lift your lower back and upper back until your upper body and thighs are in line. Hold for 5 seconds and then slowly lower down. If this is uncomfortable for your back do not lift up as high. *Repeat 10-15 times.*



## Sit to Stand

Sitting on a chair with your feet hip width apart. Stand up fully straightening your knees and then slowly lower back down. If you can try to do this without using your hands. Repeat 10-15 times.



## Weight transference

Stand with your feet shoulder width apart holding onto a surface in front of you. Slowly transfer your weight to your operated side and then return to the starting position. Keep both feet in contact with the floor throughout. Repeat 10 times.



## Hip Extension

Standing holding onto a stable surface in front of you, slowly take your operated leg backward, hold for 5 seconds and then slowly bring your leg back to the middle. Ensure you keep your upper body in a straight line. Repeat 10-15 times.



## Hip Flexion

Standing holding onto a stable surface in front of you, slowly bring your operated leg up in front of you, hold for 5 seconds and then slowly lower back down. Repeat 10-15 times.



## Hip Abduction

Standing holding onto a stable surface in front of you, slowly take your operated leg out to the side, hold for 5 seconds and then slowly lower back down. Ensure you keep your upper body in a straight line.

*Repeat 10-15 times.*



## Mini Squats

Standing with your feet hip width apart, holding onto a stable surface for support, bend your knees and lower down into a squat, go as far as you can keeping your heels in contact with the floor.

*Repeat 10-15 times.*



## Thigh stretch

Standing up, hold onto a stable surface with one hand and then hold on to the bottom frame of the Ilizarov with the other hand. Keeping your knees in line, slowly bring your heel toward your bottom until you can feel a stretch in the front of your thigh.

*Hold for 30 seconds, repeat 3 times.*



## Hip Stretch

Place the ankle of your operated leg on the opposite knee and then allow the knee to lower down toward the bed/floor. You should feel a stretch in your buttocks.

*Hold for 30 seconds, repeat 3 times.*





- These are all general exercises to strengthen and lengthen your muscles.
- These exercises should be performed three times a day and repetitions gradually increased as you feel able.
- It is important that you do these exercises regularly in order to speed up your rehabilitation and prevent any complications. Your physiotherapist may give you other exercises depending on your individual needs.
- You are encouraged to weight bear as much as possible through your operated limb as weight bearing encourages your bones to heal faster.
- You are allowed to put **full weight** through your affected leg i.e. you can put your weight through your leg as normal.
- When the pain is controlled and you are walking normally you can gradually wean of your walking aid. However If you have an Ilizarov that goes through your knee it is likely you will need a walking aid until the top ring is removed.
- A few weeks after your operation you should be able to resume normal function this includes going to the gym.

## Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email [asp-tr.patient.advice@nhs.net](mailto:asp-tr.patient.advice@nhs.net). If you remain concerned, the team can also advise upon how to make a formal complaint.

Author: Orthopaedics Team

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Version: 1

Published: Jun 2017

Review: Jun 2019

**We can provide interpreters for a variety of languages, information in larger print or other formats (e.g. audio) - please call us on 01932 723553.**



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