

Non and partial weight bearing guidance and exercises

Physiotherapy Department Patient information

You have been asked to put less or no weight through one of your legs. It is important you keep as much strength, fitness, and flexibility as possible by doing the following exercises. This will reduce the risk of complications such as blood clots and stiffness. It will also ensure that you have a stronger leg when the time comes to walk again.

Your clinician will highlight the exercises suitable for you. You can do the exercises regardless of whether you are in a boot or not.

Information on deep vein thrombosis (DVT) risk

What is a DVT?

A DVT is a blood clot in a vein, usually the leg. DVT can be dangerous. Get medical help as soon as possible if you think you have a DVT.

You may find this link helpful: www.nhs.uk/conditions/deep-vein-thrombosis-dvt

When your leg is in a plaster cast or walking boot, the lack of movement can cause blood clots (DVTs) to form in your blood vessels. A DVT itself is not life-threatening, however sometimes part of the blood clot can become dislodged and travel to your lungs. This is called a pulmonary embolus (PE) and can be very serious.

Symptoms of DVT in the leg are:

- throbbing or cramping pain in one leg (rarely both legs), usually in the calf or thigh.
- swelling in one leg (rarely both legs).
- warm skin around the painful area.
- red or darkened skin around the painful area.
- swollen veins that are hard or sore when you touch them.

These symptoms can also occur in your arm or tummy if that's where the blood clot is.

How can my risks of developing a DVT be reduced?

- We recommend that you take regular fluids to stop yourself becoming dehydrated (unless advised otherwise)
- Avoid long journeys and staying still for longer than an hour.

Urgent advice: ask for an urgent GP appointment or call 111 if you think you have DVT.

To reduce pain and swelling:

- raise your ankle above the level of your hips. Do this by lying on your back using pillows.
- use pillows or a stool to keep your ankle raised when lying and sitting.
- you can lie on your front/tummy to reduce swelling.
- raise your mattress at the 'foot end' by placing pillows underneath it. This can help reduce swelling overnight.

You may have been advised to take painkillers or anti-inflammatory medication. If you have any questions about this, please speak to a pharmacist or your GP surgery.

For the circulation:



If you are not in a boot or plaster, (or are allowed to remove it to exercise), make sure that you move your foot and ankle up and down.

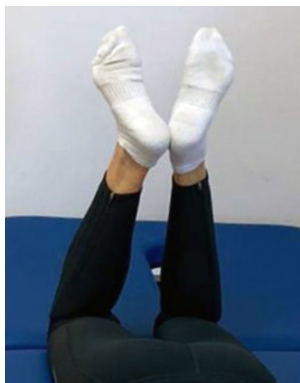
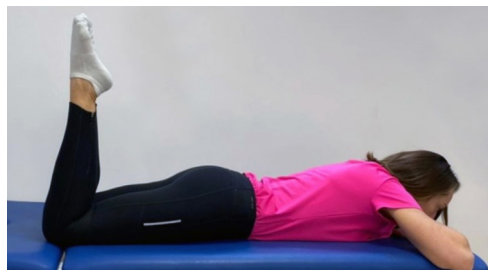
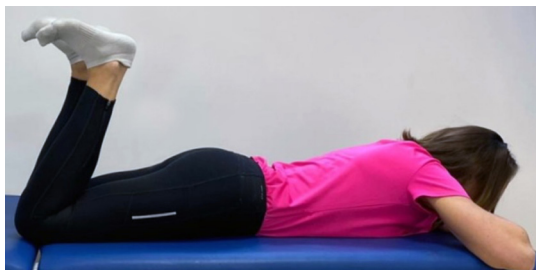
Do this at least 10 times every hour.

Throughout the rehabilitation period, do exercises 1-3 after a period of being still so that you warm up your muscles and joints before movement. Carry out the exercises the clinician has recommended you do on this leaflet as often as they recommend. They may also recommend some stretches to do in addition to the exercises on this sheet

Position one: lying face down

You won't be able to do exercise one and two if you are in a plaster or a boot and have been told not to remove it.

1. Ankle up and down - lying on your stomach with your knees bent to a right angle, point your feet up and down as far as comfortable. Do not force the ankle to go beyond a right angle.



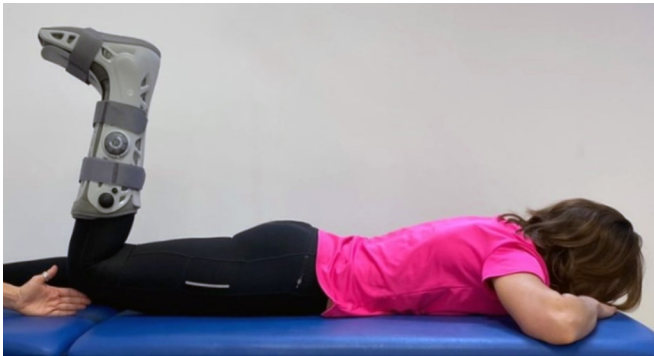
2. Feet in and out

- as above, turn your feet in and out.

3. Knee bracing - bend your toes back and brace the thigh to lift the knee cap off the bed/floor.



4. Glute squeeze - gently activate (engage) your abdominal muscles. Keeping your knee bent, squeeze into your buttock to lift your thigh a few centimetres only. Take care not to arch your back.



5. Paddling legs - bend and straighten your knee. Progress to doing both legs alternately.



6. Spine resting position - to take pressure off your back and stretch the front of your hips. Rest on your elbows for 15-minute periods during the day.

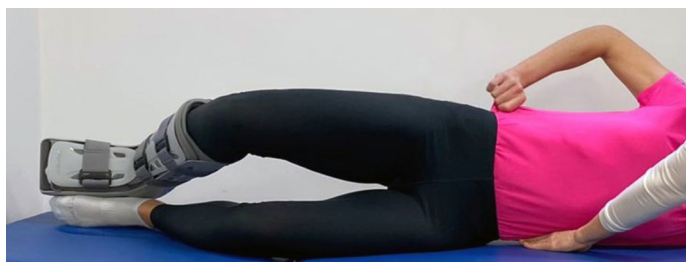


7. Spinal mobility - press up through the arms to arch your back.



Position two: lying on your side

8. Clam - to strengthen your hip muscles. Keep your pelvis still and maintain a small gap under your waist. Lift your top knee off the lower knee, keeping your heels together.



9. Side lying abduction - as above but with the top knee straight. Lift the top leg 20-30 cm and slowly lower back down. You can progress this exercise by adding small circles of the leg while it is up in the air.



Position three: lying on your back

10. Bridging - keep your big toes and heels down and your thighs 10-15cm apart. Tilt your pelvis towards you (posterior pelvic tilt). Engage your core and pelvic floor a little as you lift your pelvis off the floor. Try to avoid arching your back.



11. Progress exercise 10 by folding your arms across your chest, or by lifting one leg off the floor.

12. Bridging and hamstring curls on a gym ball - prepare your bridge as shown.



13. Inner range quadriceps - keeping your back supported, straighten your knee over a firm roll of towel or can of beans.



14. Level one Pilates scissor exercises - engage your pelvic floor muscles a little. As you exhale and lift one foot off the mat. Bring your knee towards your body into a table-top position. Let the weight of the leg to drop into the hip socket. Inhale as you maintain this position. Exhale as you slowly lower the leg back down onto the floor.

15. Abdominal strengthening - sit ups - lie on your back with your knees bent. Do a crunch by contracting your abdominal (stomach) muscles and lifting your shoulder blades just off the floor. Place your hands beside your head so that you don't pull on your neck. This exercise helps to strengthen the abdominal muscles.



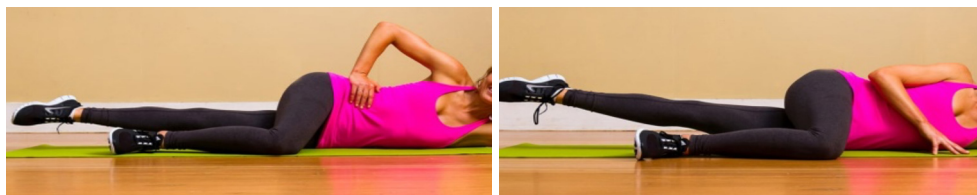
16. Abdominal strengthening - oblique sit ups. As for exercise 15 but directing your shoulder towards the opposite knee.

17. Cycling the legs - keep your core engaged as you do this exercise.



Position four: lying on the opposite side

18. Adductor strengthening - lie on your side and place your top leg and foot flat on the floor in front of you. Lift your bottom leg upwards towards the ceiling. You should feel the muscle on the inside of your thigh working.



Position five: sitting on a supportive chair

19. Heel raises - sitting on a chair with your knees 10-15cm apart and feet on the floor. Rise up and down onto your toes – together and alternating.



20. Inner range quadriceps through full range - sit with your back supported by the chair, and slowly straighten the knee as much as possible before lowering it back down again.

21. Sit on a gym ball - you can sit on a gym ball with your feet flat for up to 10 minutes at a time. Add in alternate heel lifts as above.



Position six: on all fours

22. Cat-cow/hump and hollow/angry cat exercise - for spinal mobility.



23. Knee lift - with your spine in a neutral position, brace your abdominals (stomach), press your hands into the floor and slowly lift your knees a few centimetres off the ground. Hold this position for 5-10 seconds. Then slowly lowering back down.



If you have any queries, please contact:

Your consultant's secretary

Or your physiotherapy department:

Poole: **0300 019 2121**

Christchurch: **0300 019 2802**

Or email: **fracturecare@uhd.nhs.uk**

The Royal Bournemouth Hospital, Castle Lane East, Bournemouth, Dorset, BH7 7DW
Poole Hospital, Longfleet Road, Poole, Dorset, BH15 2JB
Christchurch Hospital, Fairmile Road, Christchurch, Dorset, BH23 2JX

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