Advice: After the Removal of a Lower Leg Cast



The aim of this leaflet is to give you some understanding of the problems you have with your condition and to provide some advice on how to manage this. It is not a substitute for professional healthcare advice and should be used along with information you may be given by your GP or other healthcare practitioner.

Looking after your skin

Now you are out of the cast on your leg you may find: Dry, flaking or thickened skin; Swelling at the fracture site; Swelling into the leg and foot; Smaller, weaker muscles; Some residual bruising or discolouration; If you have had surgery for the fracture you may have a scab.

Regularly following this advice will help your skin, muscles, joints and bones to recover better.

Soak the foot in a basin of warm (not hot) water and gently rub your leg with a flannel. Use a mild soap. Your skin may go red. Have a cloth to dry your leg and then wrap it in a *cold water soaked towel* and put the leg up for five minutes. Dry off your leg and apply a plain moisturiser to the skin.

You should do this **before you have a bath** or the skin will come off in the bath.

You could need to do this several times a day or over several days if the skin is very thickened.

Looking after any Swelling

It is important to reduce the amount of swelling you have as this can alleviate pain and increase the range of movement. It should be recognised that after you have injured your foot, ankle or leg you **may** always a degree of swelling.

Using 'Contrast Bathing': Use two suitably sized bowls – fill one with cold water the other with warm water. Submerge you foot in warm water for 1-2 minutes and then immediately immerse into cold water for 30 seconds. Repeat 5-10 transfers up to twice daily.

Do not use contrast bathing over areas with reduced sensation/circulation and do not just use warm water

Elevating your leg: It is advisable to elevate your leg at regular intervals throughout the day to disperse swelling. Rest it on a stool, recline in a chair but also consider having a lie down on your bed if there is a lot of swelling. Lying with your calf up onto a pile of pillows for 10 - 15 minutes 2 - 3 times a day can be helpful. Put a spare pillow or folded duvet under your mattress (or sheet) so that the end of the bed is raised overnight.

Do not sit with your leg hanging loose in the air.

Do not sit with your leg on a stool for long periods as this can cause back pain.

Circulation exercises: See the ones below which help pump the fluid through out of the leg.

Looking after Muscle Weakness

Exercises need to be done from the removal of the cast for several weeks or months. We need to start with lighter exercises and move on from putting no weight through your leg to putting some weight through your foot. We need to increase the number of times you do an exercise and increase the difficulty as you improve.

Initially do these with your foot resting in an elevated position on the bed or on a cushion.

Exercise 1



Point your toes and foot down away from you Then pull them up towards you.

You may feel a pull in your calf

Do this 5 - 10 times, 3 - 5 times in the day.

Exercise 2



Turn your foot inwards so the big toe comes towards you

Then turn the foot so the little toe comes towards you.

Do this 5 - 10 times, 3 - 5 times in the day.

Exercise 3

Combine these two movements to rotate the foot: down - in - up - out - down and then reverse the rotation down - out - up - in - down. Do these both 5 - 10 times, 3 - 5 times in the day.

Soon after - from days 2 - 3 add these sitting with your feet on the floor.

Exercises 4 - 7: Do these 5 - 10 times, 3 - 5 times in the day.

Exercise 4



Feel the surface under your toes.

Press your toes down, and curl them inwards. Feel the arch under the foot rise.

Progress this by picking up scrunched paper with your toes.

Exercise 5



Put your foot on the floor rock it from your toes to your heel, feel the floor on your sole as you move.

Change the speed of the movement as you are able - quicker and slower.

Exercise 6

Slide your bare foot forward and backward over the floor. 'Listen' to the sensation of pressure. Increase the movement forward keeping your toes on the floor.

Bend the knee back keeping the heel on the floor.

Exercise 7



Sitting with your feet on the floor follow this sequence:

Lift the heel up - Lift the foot off the floor - straighten the knee and place the heel to the floor - lift the foot up - bend the knee and touch the toes to the floor.

Repeat this one then both feet.

Exercises that can be done in days 1 - 5 to improve the whole leg. It is good to lie down 2 - 3 times a day after the cast is off as this helps prevent swelling. Exercises 8 - 10: Do these 5 - 10 times, 2 -3 times in the day.

Exercise 8	Lying with leg straightened on bed/floor pull foot up towards you, press knee down onto bed/floor to tense thigh muscle. Count to 5 then relax.
Exercise 9	Keeping the knee straight, pull foot up towards you then lift leg about 6" / 15cm up off bed then lower slowly.
Exercise 10	Bend knee and hip up towards you as far as possible, then straighten down again. Consider remaining in this lying position for 5 - 10 minutes before getting up again.

'Weight bearing'

You will usually progress from non weight bearing (not having any weight through your foot) to partial weight bearing (allowing progressively more of your weight through your foot) to full weight bearing (allowing all your weight on your foot). After this weight will be increased by adding an impact through your leg as in a hop or jump or by you carrying extra weight. Your health care practitioner or physiotherapist will advise you of this. This process happens over several months as the bones get stronger.

Exercises 11 and 12. These are later stage partial weight bearing. Do 2 - 3 times a day.

Exercise 11	Stand holding onto something solid. Stand up onto your toes and return flat. Try to rock back raising the front of your foot. Do each 5 - 10 times then try to do them one after the other.
Exercise 12	Sit on a chair that is high enough for you to stand up without using your hands. Feet 30 - 40 cm apart Stand up slowly keeping your knees apart as you rise. Do this 5 - 10 times. Progress these to 50 times as you can over a month.

When you can put all your weight through your affected leg

Exercises 13 to 15 give some examples of what to do to regain more balance.

Exercise 13	You may want a secure surface beside you for this initially. Rock onto your heels and walk on your heels. Up onto your toes and walk on your toes. Start with a few seconds and build this up.
Exercise 14	Stand onto your affected leg and try to balance. Initially 3 - 5 seconds Increase this over a week or so to 10 - 15 seconds. 3 - 5 times and 3 - 5 times a day
Exercise 15	Once you can stand on your affected leg for 10 seconds (as exercise 14) Stand on the affected leg with the knee bent. Move the opposite toe to touch items on the floor - to left and right.

Aids for Walking

Crutches, sticks or occasionally a walking frame are required to help you improve your weight bearing. They prevent your full weight going through the healing bone too soon.

- Do refer to your leaflet on use of crutches or walking stick to ensure you are walking correctly in a good pattern.
- The amount of weight that goes through your healing limb should get more and more as the body heals.
- Walk with your walking aid placing your foot as normal heel down then push off from your toes not on your toes.
- It is better to have a good pattern than to walk with a limp but more weight through your foot.

Follow the guidance given by your health professional.

Returning to Usual Activities

Progressing your exercises and distances gradually and persistently should mean the bone will get stronger.

Pace your progression of activities - even if that is needing to drive a long way. If you do sports activities ask your physiotherapist or sports instructor on how to progress.

Managing Pain

Initially pain is most likely due to stiffness. Later it is likely that you will have some as you exercise and change the weight you put through the leg. Pain will happen if you suddenly put too much weight through the affected bone ie. a jump or if you keep putting weight through it with out a rest – i.e. if you go for an unusually long walk. The bones usually need rest and self care to recover.

- You can get advice about pain management from your community pharmacist if you have any health issues or concerns.
- If you buy over the counter medicines always follow the advice on the medicine packaging. It is usually best to take a medicine for pain and possibly inflammation to manage your pain than it is to be sore and reluctant to move.
- Touching or stroking the skin can be calming.
- Putting on cold compress made off crushed ice or a bag of frozen peas for 5 minutes every 2 -3 hours is really helpful. Ice can burn the skin so you must not do this for longer. Check out the PRICE guidelines at: www.nhsinform.co.uk/msk

If your pain becomes severe and accompanied by redness and swelling and acute tenderness go and see a healthcare professional or physiotherapist.

If your scabbed site starts to bleed or there is fluid from it, get an appointment with your practice nurse.

Further advice and support

It can take up to 6 - 12 months for full recovery from your injury, so don't be too concerned if your progression is slow. However if you feel you are not returning to function or still experiencing significant pain you should contact our physiotherapy service.

If you have any questions please contact: - Children's Physiotherapy Department on 01387 244581.

This information is also available on request in other formats by phoning 01387 241452.