



Hallux Limitus/ Rigidus

Information for patients
Podiatry



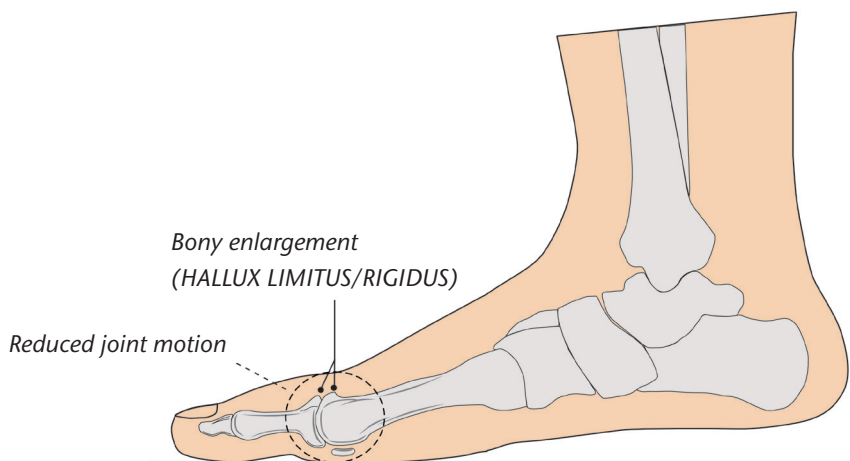
Hallux Limitus/Rigidus is a gradual condition where the movement at the big toe joint decreases with time. In the early stage, the movement at the joint will have only reduced a little, but as the problem advances the movement becomes less and eventually the big toe joint becomes stiff. The protective tissue around the joint called cartilage can become damaged causing extra bone to form around the joint. This extra bone will restrict movement and will cause pain when walking.

WHAT IS HALLUX LIMITUS/ RIGIDUS?

Hallux Limitus/Rigidus is when there is change to the bone that prevents normal movement of the big toe joint.

These changes can be minor with a slight reduction of movement and is known as hallux limitus. Hallux rigidus is when there is a significant reduction in movement and some cases there can be a complete loss of motion at the big toe joint.

Changes to the big toe joint can affect the ability of your foot to remain stable during walking. This can result in increased pressure through your fore foot and you may develop a bony enlargement on the top of the big toe joint.



Classic signs and symptoms:

- ❖ Pain, usually at the top of your big toe joint that worsens with weight bearing activity.
- ❖ Difficulty bending your big toe.
- ❖ A bony lump/ soft tissue swelling on the top of you big toe joint that may hurt when it rubs against your shoe.
- ❖ Numbness or tingling if the bony lump is pressing on your nerves.

WHAT CAUSES THE PROBLEM?

There is no specific cause of Hallux Limitus/Rigidus but there are a number of things that can increase your risk. The most common cause is trauma as this can lead to arthritic changes within the big toe joint. Unusual foot anatomy can also increase your risk. The length of your big toe can affect the function of the joint..

Other contributing factors

- ❖ Acute injury e.g. stubbing your toe
- ❖ Repetitive trauma with movements that will increase load through the big toe joint i.e. squatting
- ❖ Changes in the shape of the bones in your foot that can lead to osteoarthritis in the big toe joint
- ❖ Inflammatory diseases e.g rheumatoid arthritis, etc
- ❖ Unsupportive/ ill-fitting footwear
- ❖ Family history

WHAT CAN I DO TO HELP?

Unfortunately there is no quick or easy fix and your symptoms will not improve overnight. Making simple changes to your lifestyle and footwear choices can help improve your Hallux Limitus/Rigidus pain.

It is important to note that if you have any of the above contributing factors you consider making the necessary changes to your lifestyle to help aid your recovery.

The one person who can help you manage your symptoms is you!

WEIGHT MANAGEMENT

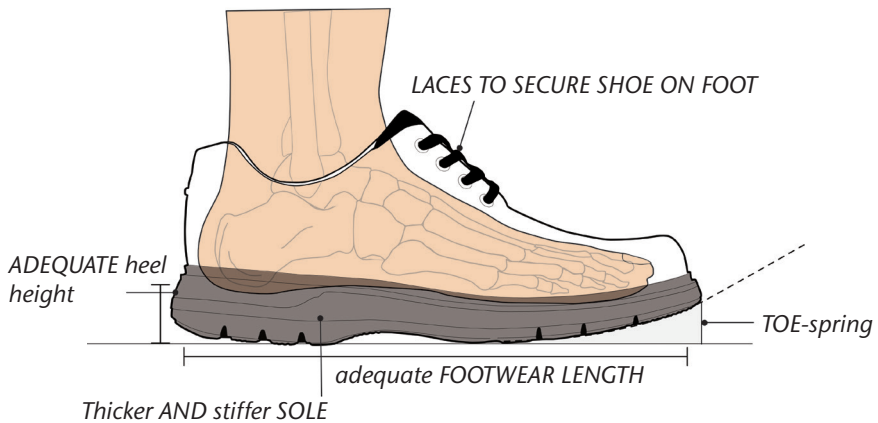


Increased weight will place extra stress on your joints and soft tissues in your feet. Losing even a small amount of weight will make a big difference to this especially when walking, running, or going up and downstairs.

If you need help with weight-control, you can find information, advice and groups you can join to help you manage your weight better. To access the NHS BMI Calculator go to: [www.nhs.uk/live-well/healthyweight/ bmi-calculator/](http://www.nhs.uk/live-well/healthyweight/bmi-calculator/) or otherwise open your camera on your smartphone or tablet and hold it up to the code and the link should appear on your screen, press this link and you'll be taken to this web address. This guide will help you on whether you should consider weight management..

FOOTWEAR

It is important to be aware that your big toe joint may not bend enough to accommodate being in certain shoes. High heeled shoes in particular will place further stress on the big joint and the soft tissues around it. Wearing a shoe with a stiffer sole and/or a curve at the forefoot area can be more comfortable. The curve at the front of your shoe is called a toe spring and helps to reduce the stress in the joints and soft tissues in your feet when walking.



PAIN MANAGEMENT

Pain medication can help reduce your symptoms, allow you to move more comfortably which will aid your recovery. Your community Pharmacist can provide guidance on specific medication or other methods of pain relief (always read the label and manufacturer's guidelines).

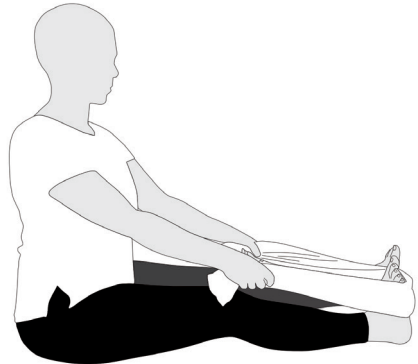
STRENGTHENING AND STRETCHING EXERCISES

Exercises can help to reduce the tightness in the muscles in the back of your leg and improve the flexibility in the foot and ankle.

1. Calf towel stretch

This exercise is designed to stretch the muscles in the back of your leg.

Start by placing a towel around the ball of the painful foot keeping your heel in contact with the ground and avoid bending your knee.



Pull the towel towards you until you feel a stretch along the bottom of your foot and the calf muscles in the back of your leg.

Hold the stretch for 30 seconds and repeat three times with a small period of rest in between stretches.

It is particularly useful to perform this stretch first thing in the morning and after periods of rest.

If you feel this stretching exercise is making your pain worse then focus on the strengthening exercises.

2. Standing Calf stretch

This exercise is done in two parts.

First support yourself by placing both hands shoulder height and width apart against the wall. Once supported take a step back with your painful foot. Make sure your heels are in contact with the ground and remain like this throughout this exercise with both feet also pointing forwards towards the wall.

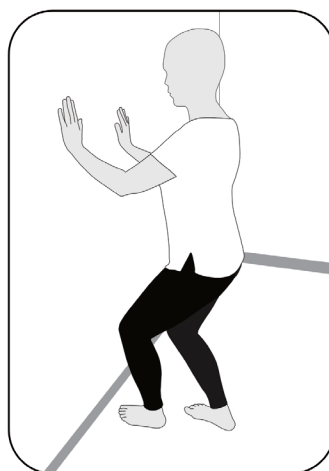
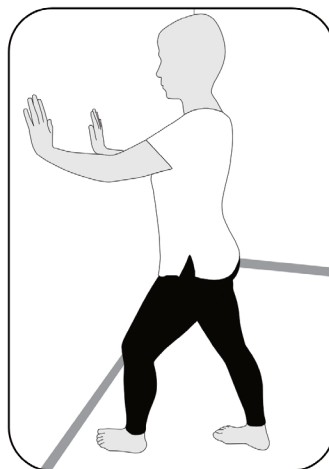
Now slowly begin to bend your front knee whilst moving your upper body towards the wall until you feel a stretch in the calf muscles in the back of your leg.

Hold the stretch for 20 seconds and repeat three times with a small period of rest in between stretches.

The second part of this exercise is designed to stretch the soleus muscle which is one of your calf muscles. Starting in the same position as before slide your painful foot towards the front foot as being demonstrated. Now when bending the front knee also bend the knee of the back leg until you feel a deeper stretch in the calf muscle. Like the other stretches make sure your heel is in contact with the ground throughout the exercise.

Hold this stretch for 20 seconds and repeat three times.

If you feel this stretching exercise is making your pain worse then please focus on the strengthening exercises.

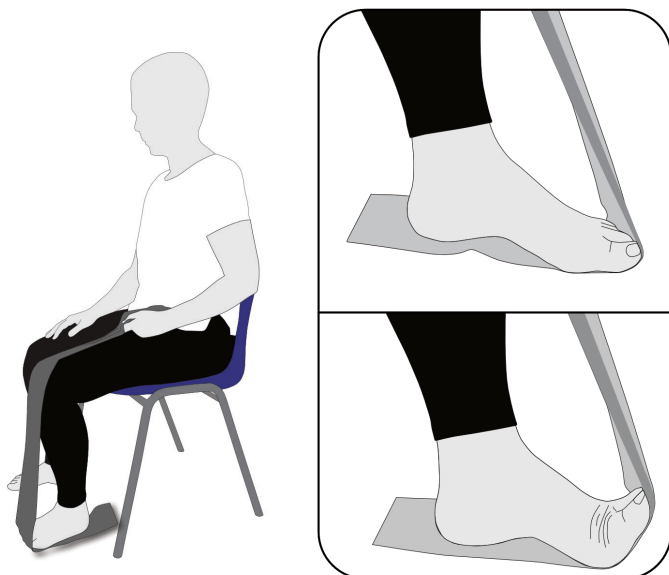


3. Intrinsic foot exercises (Theraband)

This exercise is designed to strengthen the small muscles in the foot. This exercise is performed in a seated position making sure your back is straight and leg bend comfortably at 90 degrees with your painful foot placed on a strip of Theraband.

Pull the end of the Theraband over your knee towards you which in turn will pull your toes up into a flexed position. Anchor the band on your thigh maintaining a good level of tension throughout the exercise. Hold the band tight and begin to slowly push your toes down towards the ground against the resistance of the band. When your toes reach the ground allow them to slowly raise back to their starting position.

You are aiming to do three sets of around 10-15 repetitions. You can adjust the difficulty of the exercise by creating more or less tension on the Theraband. Make sure your heel stays in contact with the ground throughout the exercise.



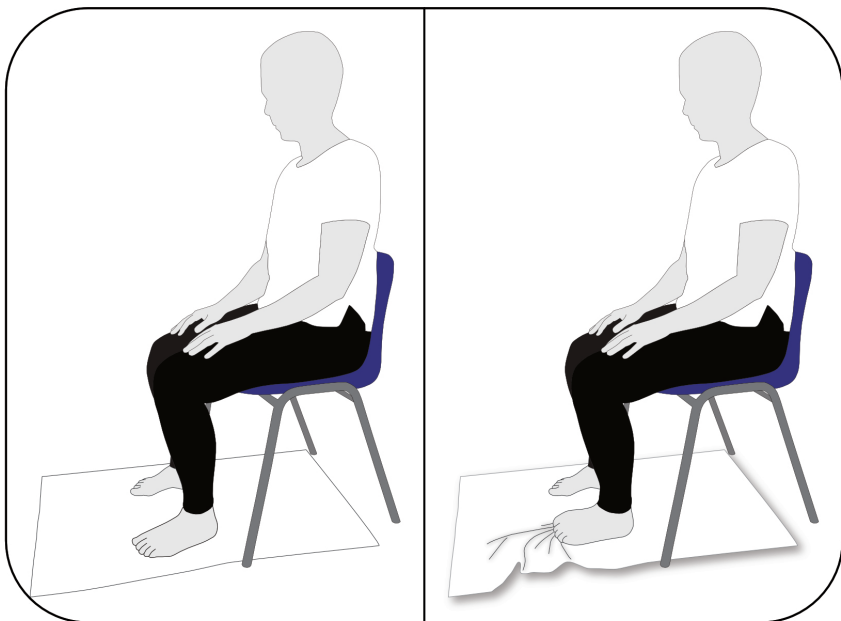
4. Intrinsic towel strengthening

This exercise is designed to strengthen the small muscles in your foot.

Start by placing a small towel flat on the ground. This exercise is performed in a seated position making sure your back is straight and legs bent comfortably at 90 degrees.

Place your painful foot on top of the towel and using your toes start scrunching the towel so that it is being pulled towards you. Do this in a slow controlled manner, making sure your heel remains in contact with the ground throughout this exercise.

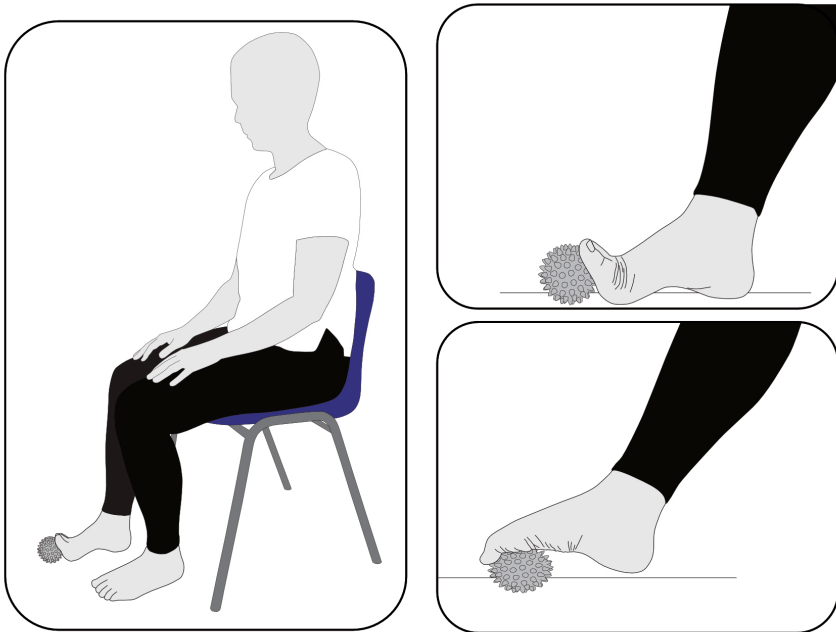
When you have pulled the towel in as far as possible, flatten it back out and repeat the process between three and five times.



5. Foot arch exercise

This exercise is designed to strengthen the muscles in the arch of the foot.

Sitting comfortably in a chair, flex your toes against the friction ball with your heel and ball of the foot placed on the ground.



Slowly lift your heel and start to roll the ball under your toes. Your toes must continue to stay in contact with the ball at all times. Hold this position for three seconds and then slowly roll the ball backwards to bring the foot back to its starting position. When rolling the ball back make sure your heel touches the ground first before the ball of the foot.

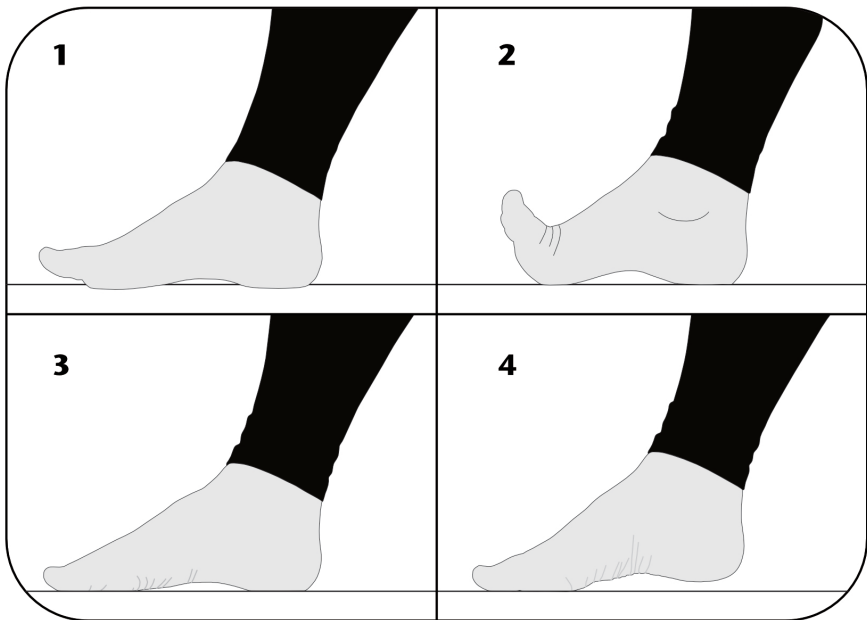
You should be able to feel the effects of this exercise in the arch of your foot and the muscles in the back of your leg.

6. Toe motion exercise

This exercise is designed to strengthen the small muscles in your foot and can be done with or without footwear.

In a seated position place your heel and ball of the foot on the ground and lift your toes towards you holding this for five seconds. Slowly bring your toes back down to the ground. Now with the tips of your toes grip the ground and slowly lift your heel up very slightly. Hold this position for five seconds. Relax and bring the toes back towards holding again for five seconds. Continue to work between these two positions for 10 repetitions.

If you experience some cramping in your foot when doing this exercise you should reduce the number of repetitions.



STRAPPING

Strapping/Taping can be a useful short term treatment to reduce painful movement at the big toe joint. Once movement has been controlled you should note improvement in your symptoms.

- ❖ The aim of low dye taping is to help reduce the movement and discomfort in your big toe joint.
- ❖ The tape used for this is a rigid strapping called zinc oxide tape. It's available in most pharmacies and can also be bought online.
- ❖ Taping is only a short term treatment and we recommend it's used until your pain levels decrease.

WHAT CAUSES THE PROBLEM?

We advise that each application of the tape is kept in place for a maximum of 3 to 4 days. You may find that the tape needs to be replaced more frequently in order for it to remain effective. Before you start it can sometimes be helpful to have your strips of tape pre-cut.

For this taping technique you will need 2 strips long enough to circle around your mid foot and 2 short pieces to go around the base of your big toe. These are called the anchors to which 6 longer strips (you might need more) are going to attach.

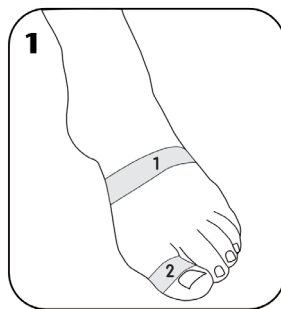
HOW TO APPLY THE TAPE

You might need to get someone to help you with this.

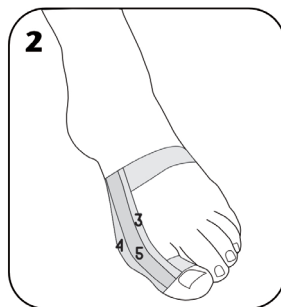
1. First, take one of your long anchor strips and, starting on the inside of your foot, wrap it under and all the way around your mid foot. It doesn't need to be tight, but make sure that it's placed firmly enough that it won't slip down your foot.

You now need an anchor on your big toe so taking one of the short strips, wrap it around the base of your big toe.

2. Once the anchors are in place, take one of the 6 long strips and attach one side to the anchor on your big toe. Applying a little tension run the tape down the inside of your foot and attach it to the anchor around your mid foot. The amount of tension used will be subject to your level of pain and how much you want to limit or restrict the movement at the big toe joint.

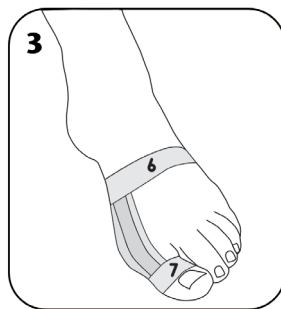


Taking a second long strip of tape repeat the process only this time start slightly under the big toe overlapping the first strip by about two thirds. Again this should be applied with some tension. It is important you try and avoid any wrinkling of the tape as this may cause irritation to your skin.



Continue placing the remaining strips of tape this way, overlapping one another keeping applying them until you've gone all the way around the big toe joint.

You might need more than 6 strips or might need less. It will all depend on how much you want to reduce the movement at the big toe joint.



3. With the remaining anchor straps, place the short one around the big toe and the long one around your mid foot. These will help to keep the tape in place.

Initially the tape might feel slightly tight but this should ease off. The tape should be removed immediately if you experience any increased discomfort, irritation, itching or pins and needles.

PADDING

If the skin on the top of the big toe joint becomes irritated by your footwear, cover the area with a dry dressing (if the skin is broken) or some padding (fleecy web/semi compressed felt) if not. Padding will help reduce the pressure and friction and can be bought from your local pharmacy or online.

PATIENCE

Have patience. Your symptoms should start to improve within three months of following this advice.

WHAT ELSE CAN BE DONE?

The good news is that your pain should start to improve once you start following the above advice.

If you have any concerns that you are getting worse or notice any changes in the shape of your foot please contact your local MSK Podiatrist or email Podiatry [**MSK@lanarkshire.scot.nhs.uk**](mailto:MSK@lanarkshire.scot.nhs.uk).

FREQUENTLY ASKED QUESTIONS

The information below will answer many of the questions you may have in the early part of your treatment. We aim to ensure your specific needs are considered throughout.

A shared decision making process is used by our teams. This means you will be informed about the treatment options open to you the risks and benefits of each option. You will be supported to make a choice about which treatment best meets your needs.

We hope the following questions that have been developed on the back of MSK focus groups, will provide you with some answers and information around your condition.

What is wrong? Why? What is the cause?

Hallux Limitus/Rigidus is a gradual condition where the movement at the big toe joint decreases with time. In the early stage, the movement at the joint will have only reduced a little, but as the problem advances the movement becomes less and eventually the big toe joint becomes stiff. The exact cause is unknown. Inherited factors (runs in the family) trauma and ill fitting footwear are all known causes.

What is the possible impact on my health and function?

Hallux Limitus/Rigidus can cause pain when walking and you may have difficulty finding comfortable footwear.

If the skin on the top of the big toe joint becomes irritated by your footwear, cover the area with a dry dressing (if the skin is broken) or some padding (fleece web/semi compressed felt) if not. Padding will help reduce the pressure and friction and can be bought from your local pharmacy or online.

Will I get better or worse?

The good news is that your pain should start to improve once you start following the above advice. The aim is to reduce the pressures around the big toe joint.

The one person who can help you get better is you!

How long will it take to get better?

Your symptoms should start to improve within three months of following the above advice.

What are you (the health professional) able to do about my problem?

By using our self-help tool, we would like to help you to better understand your condition and provide you with the tools which should help support your recovery.

What is the treatment that is most appropriate for me?

Treatment protocols for Hallux Limitus/Rigidus always start with basic principles and we would encourage you to consider trying some self-help treatment in the first instance before making a referral to your local Podiatry department.

What can I do to help myself to alleviate it?

We would encourage you to consider trying some selfhelp treatment in the first instance.

Why am I not improving? Where have I gone wrong?

Am I doing the right things?

There could be a number of reasons why your symptoms may not be improving. If you have followed the self-help advice for three months and your pain has not started to improve please contact your local MSK Podiatrist or email **PodiatryMSK@lanarkshire.scot.nhs.uk**.

How can I maintain my function and do the things I want to and need to do?

If you are in pain do not try and do all your normal daily activities such as housework at once. Break the harder jobs down into smaller time frames and do something gentler in between. Extensive walking or standing should be avoided if it may aggravate your pain. It is recommended to modify activities rather than to fully stop all forms of movement or exercise. Work out what you can do relatively pain free and use that as a starting point. Then over time, build up your activity. Track and write down your progress to keep you motivated.

What activities can I do and how should I adapt them

(e.g. sports, work)?

Avoid high impact activities like running which will significantly increase the load through the big toe joint. We would encourage you to participate in low impact activities like walking, swimming, cycling etc, until the pain is at a manageable level.

CONFIDENTIALITY AND THE USE OF PATIENT INFORMATION

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NHS Lanarkshire - for local services and the latest health news visit www.nhslanarkshire.org.uk

NHS Lanarkshire General
Enquiry Line: 0300 30 30 243

NHS inform - The national health information service for Scotland.

www.nhsinform.co.uk
Tel No: 0800 22 44 88

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