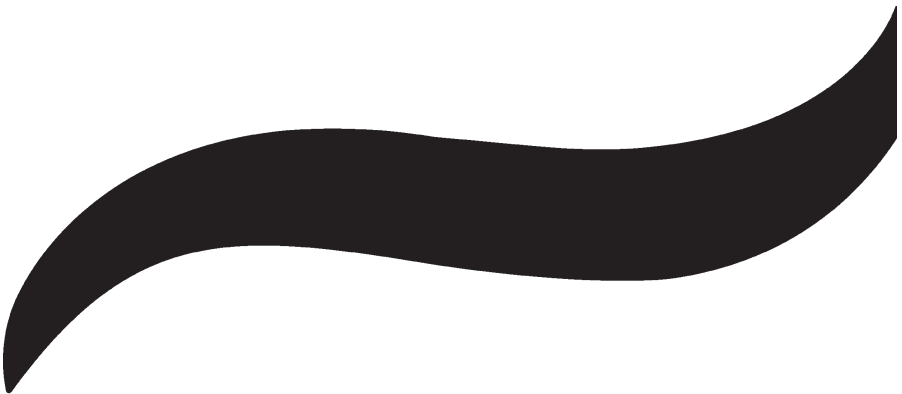




Sesamoiditis

Information for patients
Podiatry



WHAT IS SESAMOIDITIS

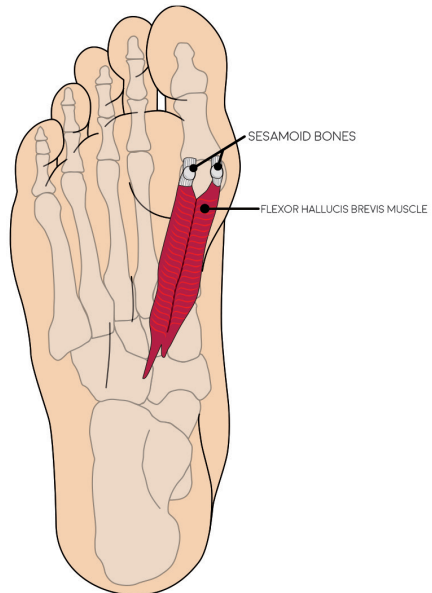
Sesamoiditis is where there is inflammation and pain in sesamoid bones and surrounding soft tissues. Pain is felt under the big toe joint. Young active people are most commonly affected. While Sesamoiditis pain can come and go it can cause great discomfort especially when walking.

WHAT ARE THE SESAMOIDS?

The sesamoid bones are two small bones that sit within one of the tendons that runs underneath your big toe joint. They act as a pivot for the tendons that bend the big toe. There is a medial sesamoid (nearest the inside of the foot) and a lateral sesamoid (nearest the second toe). The medial sesamoid tends to be the one that causes discomfort.

Classic signs and symptoms:

- ❖ Pain underneath your big toe when walking, especially when your big toe bends
- ❖ Pain on weight bearing activity
- ❖ Pain eases with nonweight bearing activity
- ❖ Pain on direct pressure of area
- ❖ Swelling

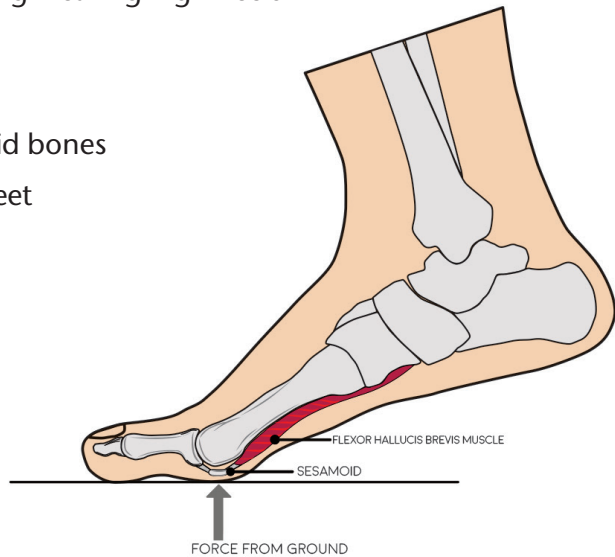


WHAT CAUSES THE PROBLEM?

In most cases Sesamoiditis develops as a result of sudden changes in activity or how often and how much load is being placed through the big toe joint. This will cause small injuries and lead to injury.

Other contributing factors

- ❖ Sudden increase in weight
- ❖ Wearing unsupportive footwear such as shoes or sandals
- ❖ Impact/ trauma -tired/ overused feet
- ❖ Repeated loading from sports
- ❖ Sudden increased activity such as starting a new job or leisure activity
- ❖ Sudden bending of you big toe
- ❖ Regular walking wearing high heels
- ❖ Osteoarthritis
- ❖ Osteoporosis
- ❖ Large sesamoid bones
- ❖ High arched feet
- ❖ Flat feet



VIEW OFF THE BIG TOE FROM THE SIDE

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/ 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

If high heels or other shoes are causing an increase in your discomfort, you should avoid these and opt for something more supportive and comfortable. Soft, cushioned, lower heeled shoes with a stiff toe spring should help to reduce the bending of your big toe which can help to reduce your symptoms.

Shoes that have flexible soles generally offer the foot less support and can increase the stress in soft tissues within your foot. If you have shoelaces make sure they are tied appropriately. Avoid wearing hard, flat or unsupportive shoes.

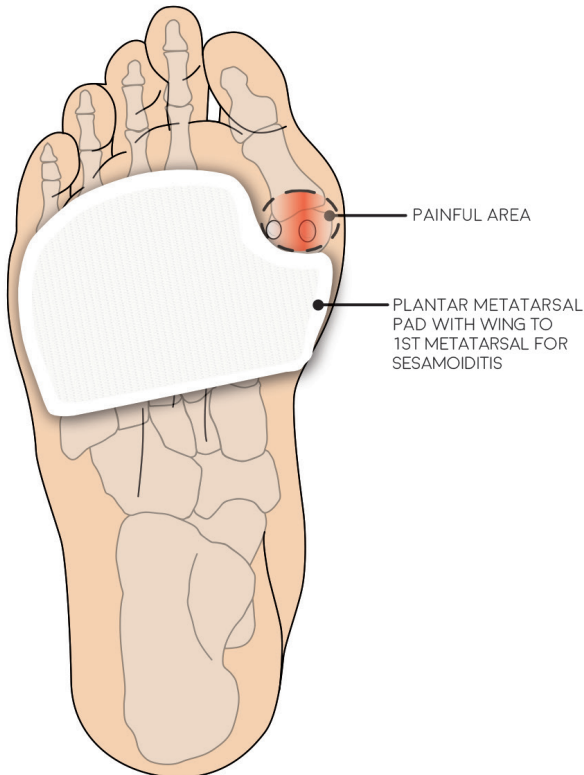


ACTIVITY MANAGEMENT

Return to activity gradually. Avoid activities that make your symptoms worse. Resting and/or reducing your activity level should allow you symptoms to settle naturally. If you engage in sports and activities that require a lot of pressure to be placed on the ball of the foot, you are at a higher risk of symptoms developing and/or slow recovery.

PADDING AND STRAPPING

To help cushion and offload the sesamoids, a pad can be placed into your shoe or directly on the foot. Consider something made of a dense rubber.



STRETCHING

Tight calf muscles can result in increased pressure through your big toe joint. Stretching the calf muscles will help to relieve some of the pressure through the sesamoids.

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.

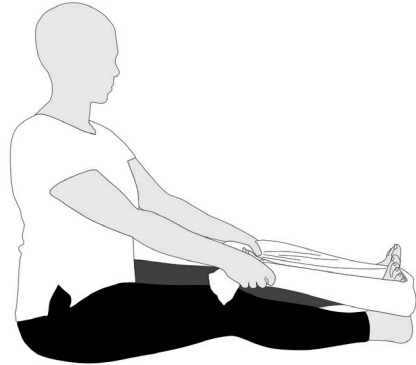
Pull the towel towards you until you feel a stretch along the

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.

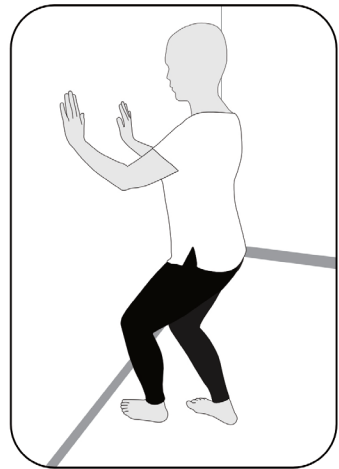
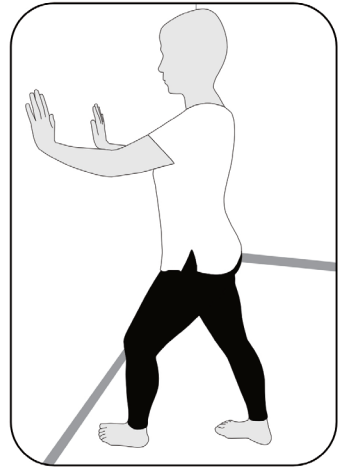
The second part of this exercise is designed to stretch the soleus muscle which is one of your calf muscles.

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.

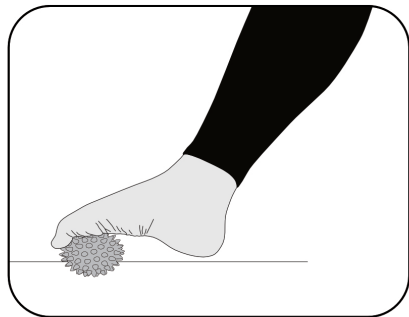
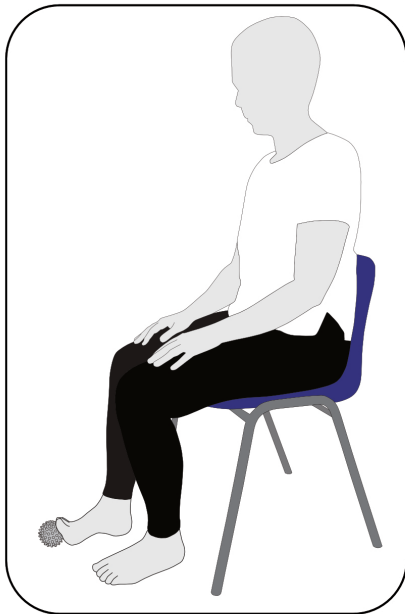
If you feel this stretching exercise is making your pain worse then please focus on the strengthening exercises.



3. 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.

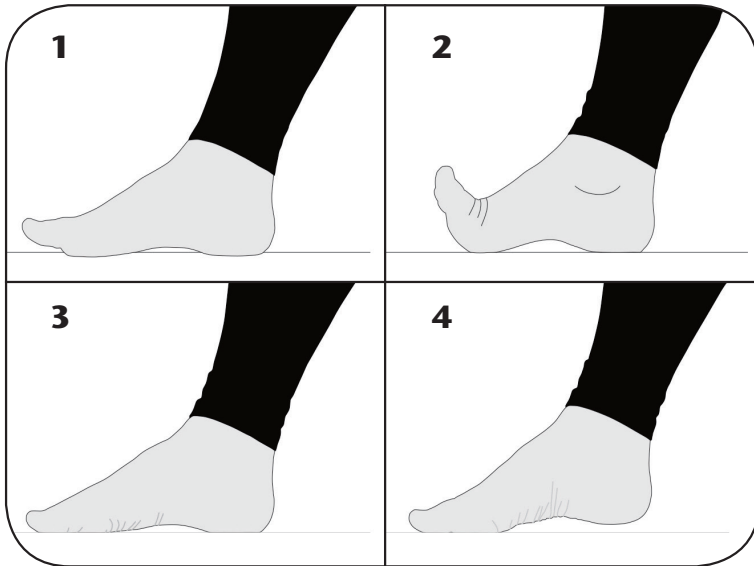
You should be able to feel the effects of this exercise in the arch of your foot and the muscles in the back of your leg.

4. 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.

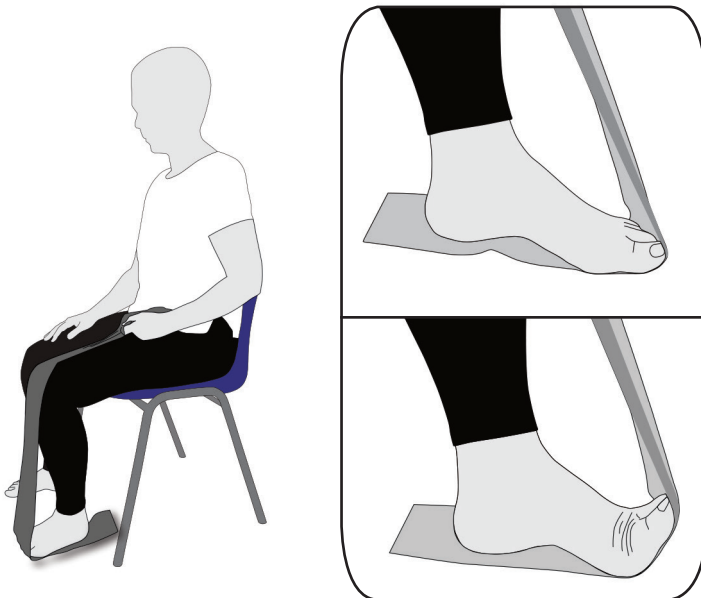


5. Intrinsic foot exercises (Theraband)

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.



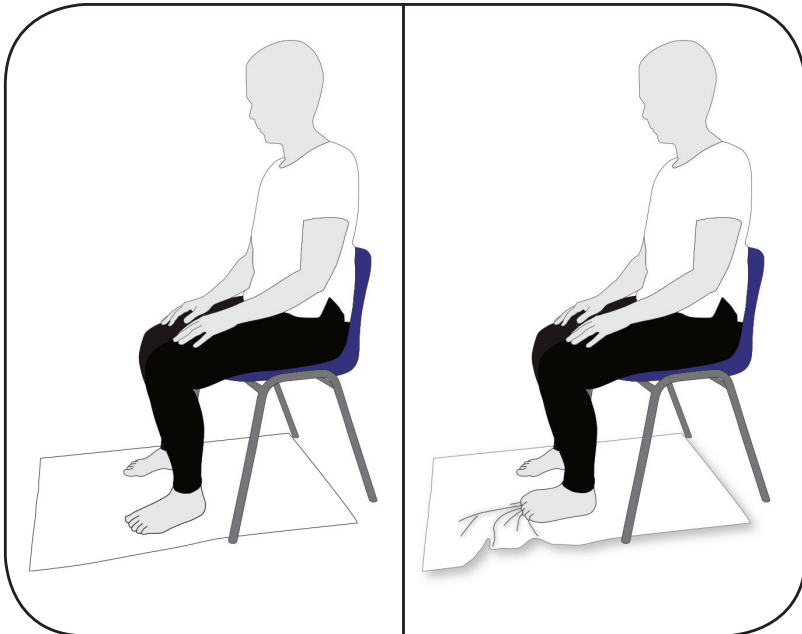
6. Intrinsic towel strengthening

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.



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).

INJURY MANAGEMENT

If you have severe sudden foot pain or have had an episode of trauma we would advise that you seek medical treatment straight away. If you have developed a new lump or bump or there has been a change in a preexisting one contact your GP as soon as possible.

If your symptoms are not related to any of the above and has been present for less than 48 hours please contact your GP.

After 48 hours it is normal to still be experiencing symptoms. It is important to slowly begin weightbearing through your painful foot as prolonged rest could lengthen your recovery period and may impact on your health and wellbeing.

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 jobs and do something gentler in between.

Extensive walking or standing should be avoided if it aggravates your pain. It is recommended to modify activities rather than to fully stop all forms of movement or exercise. Swimming or cycling are an alternative to walking or running as these activities are non-weight bearing.

After periods of activity you may experience an increase in pain. Applying some ice can be useful in reducing some of the inflammation in and around the sesamoid bones.

This can be achieved by:

- ❖ Wrapping crushed ice in a damp towel.
A damp towel between the ice and the skin will help to avoid an ice burn.
- ❖ Hold it for 20 minutes against the painful area. Alternatively, you could try sports sprays and gel/cool packs, which will do a similar job.

STRAPPING

Strapping/Taping can be used to help support the big toe to help reduce movement which can reduce the forces through the sesamoid bones. This can be a useful short term treatment that can help reduce 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.

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.

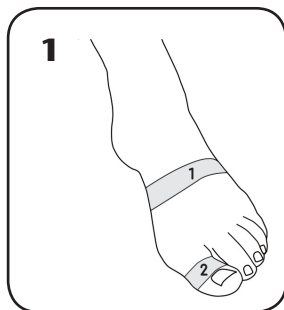
Before you start it can sometimes be helpful to have your strips of tape pre-cut.

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.

HOT TO APPLY THE TAPE

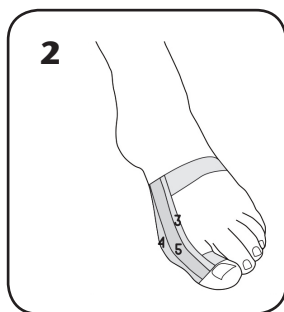
You might need to get someone to help you with this.

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.

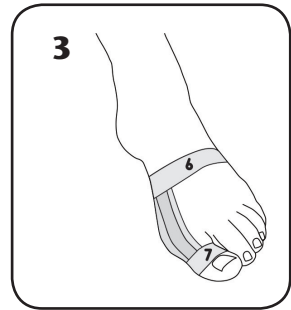
Continue placing the remaining strips of tape this way, overlapping one another keeping applying them until you've gone all the way around the big toe joint.

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.



PATIENCE

Have patience, most people's 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 PodiatryMSK@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?

Sesamoiditis is a condition where inflammation occurs around the sesamoid bones. Pain is usually felt under the big toe joint. This is often accompanied with swelling in the surrounding soft tissues. Young active people are most commonly affected. While sesamoiditis pain can come and go, it can cause great discomfort, especially when walking. In most cases sesamoiditis develops as a result of sudden changes in activity or loading rate. This creates micro-trauma leading to injury.

What is the possible impact on my health and function?

It can restrict your day to day activities and limit your ability to walk or exercise, which in turn can lead to strains elsewhere in the body.

Will I get better or worse?

The good news is that your pain should start to improve by following the advice that is aimed at reducing the pressure and inflammation from around the big toe joint.

Is it curable?

Unfortunately there is no quick or easy fix and your symptoms will not improve overnight. We would advise you complete the self help advice in the first instance. The advice above is focused on reducing the pressure and inflammation from around your joint. Your pain should improve but it may take time to get better.

How long will it take to get better?

Your symptoms should start to improve within 3 months of following this 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 sesamoiditis 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 jobs and do something gentler in between. Extensive walking or standing should be avoided if it aggravates your pain. It is recommended you 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 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

NHS Lanarkshire take care to ensure your personal information is only accessible to authorised people. Our staff have a legal and contractual duty to keep personal health information secure, and confidential. In order to find out more about current data protection legislation and how we process your information, please visit the Data Protection Notice on our website at www.nhslanarkshire.scot or ask a member of staff for a copy of our Data Protection Notice.

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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