

# Scleroderma and your feet

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Podiatrist and High Risk Foot Clinic Coordinator (MMC) Monash Health



**ComplexFoot**  
SOLUTIONS

# Today's session

How Scleroderma affects your feet

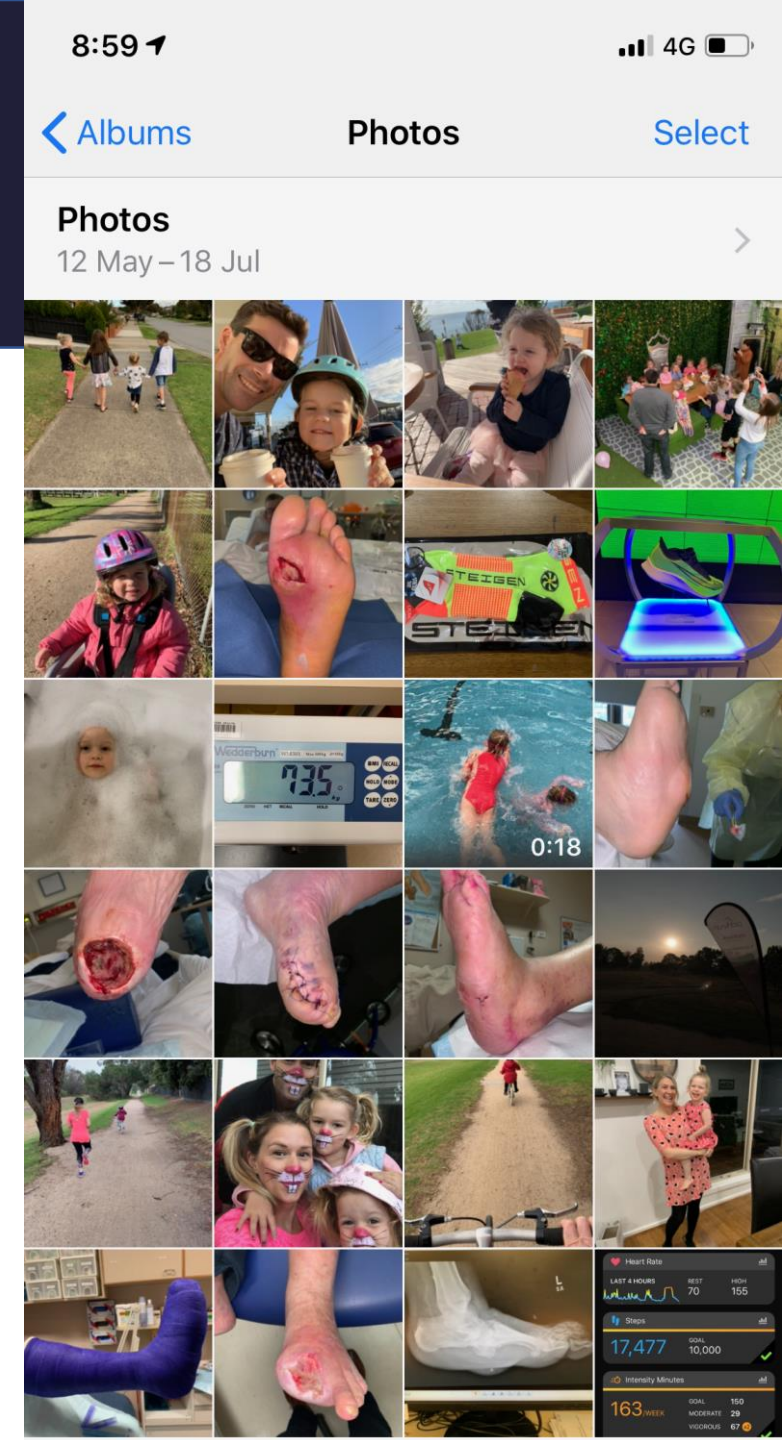
What to look for and changes you might notice in your feet

Looking after your feet

- Footcare
- Shoes

Where to find help

Questions



# What does a podiatrist do?

General foot assessment, education/advice and treatment of:

- Corns, callus and nails
- Footwear assessment

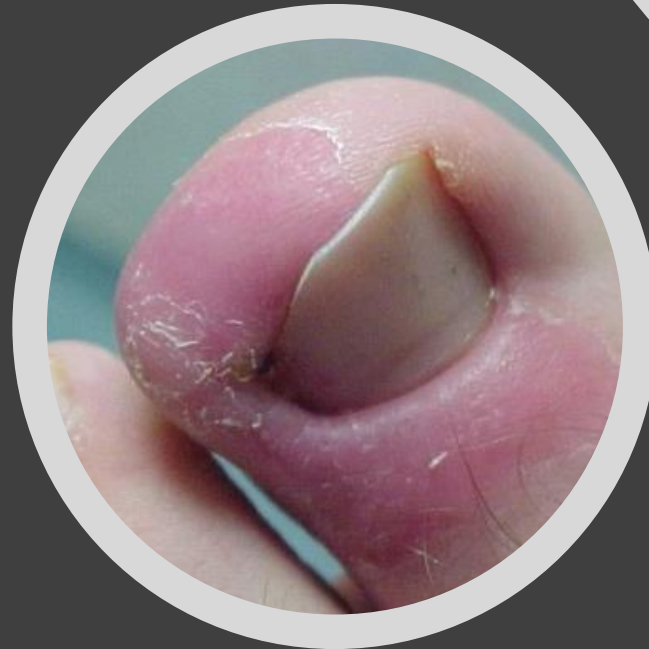
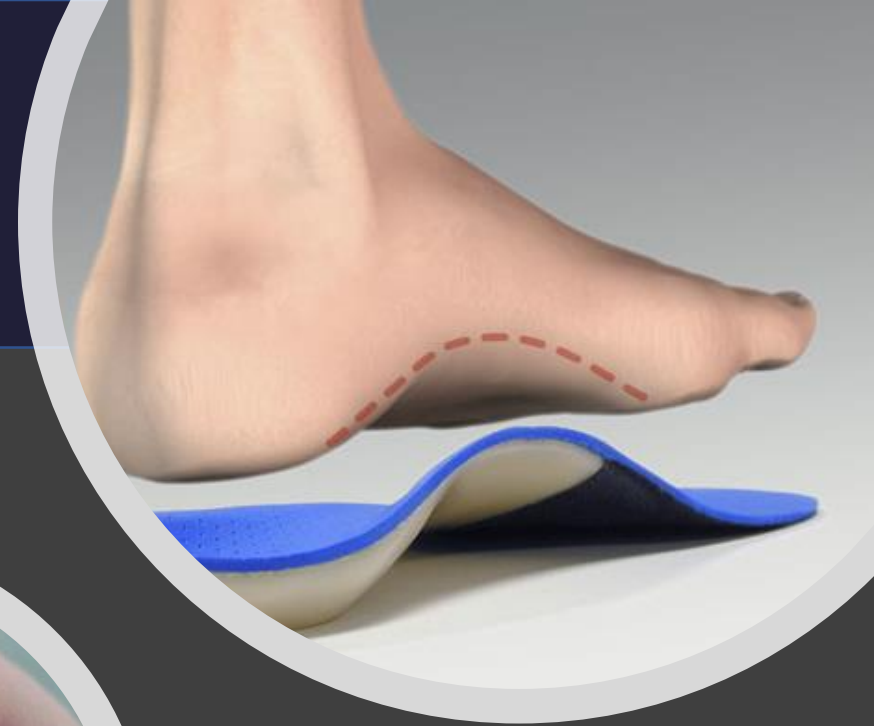
Biomechanical examination and treatment

- Assessment of foot posture
- Assessment/treatment of sporting injuries. E.g. ankle sprains/strains
- Orthotic prescription

Ingrown toe nails


High risk foot care

- Foot screenings – Neuro/Vascular assessment
- Education
- Diagnosis and treatment of foot wounds
  - Debridement
  - Dressing plan
  - Offloading



**SCLERODERMA NEWS** HOME COLUMNS CATEGORIES WHAT IS SCLERODERMA? THERAPIES

UPDATES NEWS Lung Function Test May Offer Non-invasive Way to Detect Early PAH in SSc Patients



## SCLERODERMA AND THE ORDINARY GIRL

by Kim Tocker

— JULY 17, 2019 —  
Rituximab's Immunosuppressive Effects Go Beyond B Cells in SSc, Study Finds

— JULY 16, 2019 —  
Navigating the Uncharted Waters of Scleroderma

— JULY 15, 2019 —  
Lung Function Test May Offer Non-invasive Way to Detect Early PAH in SSc Patients

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— JULY 10, 2019 —  
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**WHAT IS SCLERODERMA? NEWS**



**Know the face OF SCLERODERMA.**  
And help us find a cure.

**Who We Are**  
The Scleroderma Foundation is a 501(c)(3) nonprofit organization.

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Understanding Arthritis Types **Scleroderma** **What is Scleroderma?** Scleroderma, which means "hard skin," affects about 200,000 Americans. It is not contagious, infectious or curable. Scleroderma refers to two conditions - localized scleroderma and systemic sclerosis.

**Localized Scleroderma**  
This condition mainly affects the skin, but also can affect tissues beneath the skin including fat, connective tissue, muscle and bone. Localized scleroderma is more common in children. In adults, it affects women more often than men. It can appear between the ages of 20 and 50.

There are two types of localized scleroderma:

- Linear:** This type causes lines or streaks of thickened skin from over one area of the body, such as an arm, leg or the hand, and may cause deep tissue injury (ulcers) on the skin.
- Morphea:** It is characterized by one or more hard, oval-shaped, whitish or darkened patches of skin.

**Systemic Sclerosis**  
This condition can affect many parts of the body, such as the skin, blood vessels, digestive system, heart, lungs, kidneys, muscles and joints. Thirty percent of people with scleroderma have this type. Systemic sclerosis may be classified as either limited or diffuse.

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## Navigating the Uncharted Waters of Scleroderma

— JULY 16, 2019 — BY KIM TOCKER IN COLUMNS, SCLERODERMA AND THE ORDINARY GIRL

### SCLERODERMA AND THE ORDINARY GIRL

by Kim Tocker



<https://www.sruk.co.uk/scleroderma/scleroderma-and-your-body/hands-and-feet/>



# The Foot in Systemic Sclerosis (Systemic Scleroderma)

## How can systemic sclerosis affect the feet?

Most people tend to give their feet little consideration until they develop problems. Systemic sclerosis (systemic scleroderma) can affect the feet in many ways including the circulation, nails and skin.

### CIRCULATION & RAYNAUD'S PHENOMENON

We know that systemic sclerosis can be associated with problems with the blood vessels that can lead to poor circulation. In some circumstances, this can lead to difficulties such as breaks in the skin known as ulcers which can be painful and take a long time to heal.

Raynaud's is the abnormal response of blood vessels, commonly occurring in response to a change in temperature. Raynaud's is frequently seen in the fingers but is also common in the feet; however we notice it less as we can't see the colour changes because our feet are usually covered up!

Prolonged or very frequent Raynaud's spasms can damage areas of tissue leading to ulcers. These can be painful and prone to infection, therefore if you suspect you have an ulcer you

### NAILS

The nails can be affected in several ways. We know from looking after many patients with systemic sclerosis that the bones at the end of toes may alter their shape (be re-absorbed), which in turn alters the shape of the nail. This may lead to an increased incidence of ingrowing toes nails, which can be both painful and prone to infection.

### SKIN

Many patients with systemic sclerosis experience patches of thickened skin, and these patches may be found on the feet, commonly on the dorsum (top) of the foot. You may also notice that your skin generally becomes dry and itchy.

Some people may experience calcinosis where bumps of calcium form under the skin and can be painful. Sometimes the calcium breaks through the surface of the skin and a soft chalky substance is released which often eases the discomfort. It is very important not to attempt to treat these yourself but to observe the calcinosis for signs of infection, which will require assessment by your doctor for antibiotics, and to seek medical advice if the calcinosis is a problem to you.

Some people with systemic sclerosis experience a feeling of 'walking on pebbles', particularly when

Scleroderma Australia produce a number of informative brochures which explain various aspects of the disease. These cover a wide range of issues and are available free to download.

### Understanding and Managing Scleroderma



### Eating Well

#### EATING WELL

##### Nutritional Needs in Scleroderma

By Lise Gloede, Registered Dietitian

*The purpose of this booklet is to assist people with nutritional concerns relating to scleroderma and to also ensure people continue to enjoy food, sometimes with dietary modifications. Importantly, this booklet is intended as a guide and if you require more individualised dietary information, please seek the professional advice of a dietitian.*

Advice for those with nutritional concerns relating to scleroderma.

The brochure includes sections on: food preparation, physical effects of scleroderma, calcium intake, and maintaining weight and avoiding malnutrition.

Download

### More than skin deep

#### Scleroderma – More than skin deep



June 29 is World Scleroderma Day

World Scleroderma Day was created to raise awareness of what it means to have this disabling disease. June 29 is a day to recognise the bravery of those who live with this disease and to demand equal treatment and care for people with scleroderma.

Download

## About

## What is Scleroderma

Scleroderma, or systemic sclerosis (SSc), is a disease that affects the skin and internal organs. It is intended to help people understand scleroderma, their families, and the symptoms associated with Scleroderma. It is a chronic condition that can be life-threatening.

One of the hallmarks is the thickening or hardening of the skin. The word scleroderma comes from the Greek (sclero=hard, derma=skin). However, scleroderma is not just about Scleroderma.

- it is a systemic disease, that is, it may affect many parts of the body

# How does Scleroderma affect your feet?

Swelling/puffy toes (fingers too)

Painful joints

Raynaud's phenomena

Chilblains



<https://sclerodermainfo.org/faq/symptoms-and-prognosis/>



# Skin and soft tissue problems

Skin thickening/Dry and scaly

Muscle and tendon thickening

Calcinosis – Calcium deposits in the skin

Fat pad thickening – feeling of walking on pebbles

Ulcers and sores

Damage to small blood vessels





# Mr Jay – 46 y/o Male

Medical problems:

Limited Scleroderma

-Raynaud's

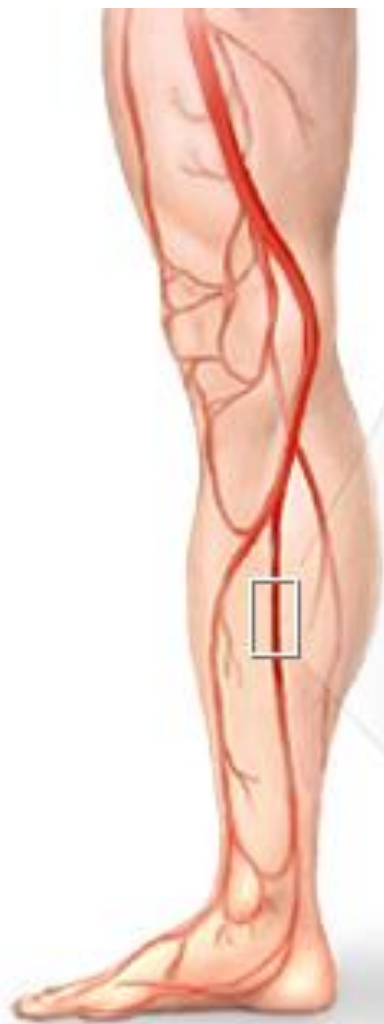
-Digital wounds/ulcers

-Reflux

-Calcinosis (hard calcium deposits  
in skin)

Diabetes (Type1)





Arteries become narrowed and blood flow decreases in arteriosclerosis



Build up of fatty substances in the wall of the artery

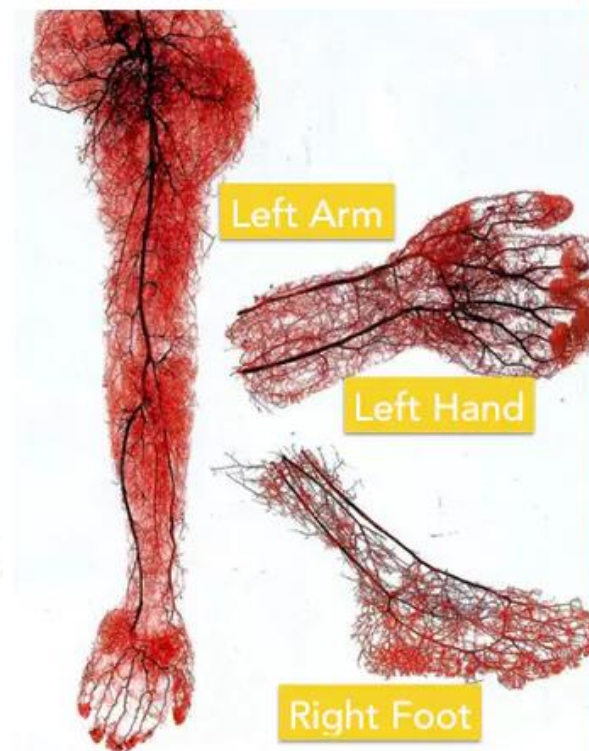


image source: Bodies Revealed

## Capillaries

When arteries reach cells they turn into really thin tubes called capillaries.

The really thin tubes that carry blood in this image are capillaries.

The walls of capillaries are very thin. This helps them transfer water, oxygen, and carbon dioxide, between blood and cells.



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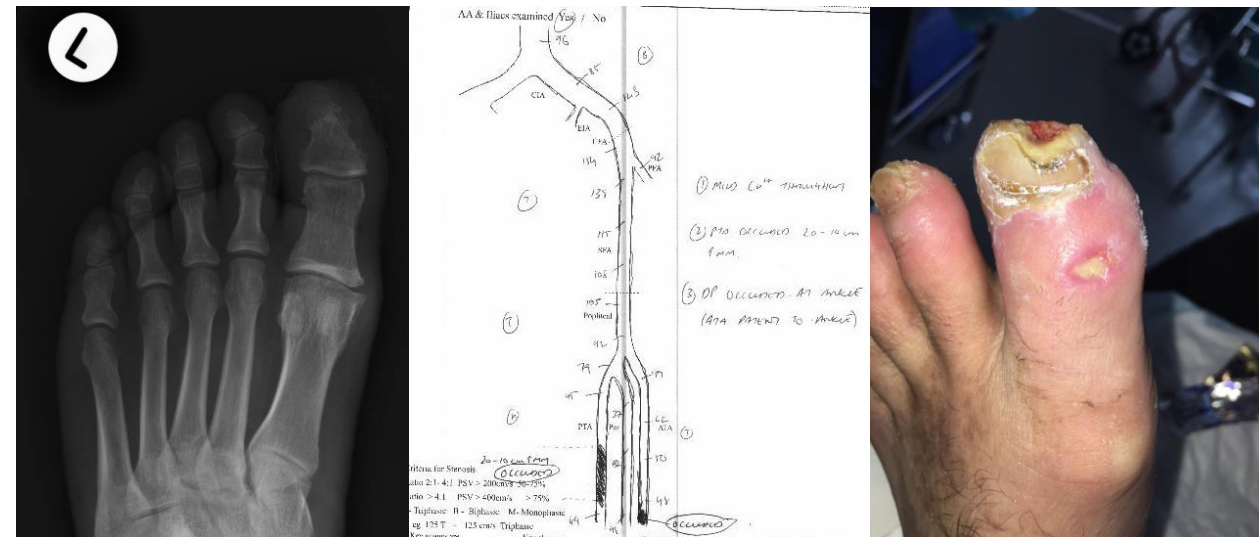
-Digital wounds/ulcers

-Reflux

-Calcinosis (hard calcium deposits in skin)

Diabetes (Type1)

September 2016 - Current problem was his L 1<sup>st</sup> toe wound



# Treatment

15 days in hospital

64 days of antibiotics through a drip

9 months of antibiotic tablets

Daily dressing changes

4 x-rays

1 bone scan

3 angiograms

2 Illiprost infusions

**Sep 29, 2016 and Nov 28, 2018:**

2 years 1 months 30 days

or 25 months 30 days

or 112 weeks 6 days

or 790 calendar days



# How to look after your feet

Stay warm

Exercise

Toenail cutting

Use moisturiser regularly – Avoid between toes

Lightly use a foot file

Never use medicated corn pads

See your podiatrist regularly

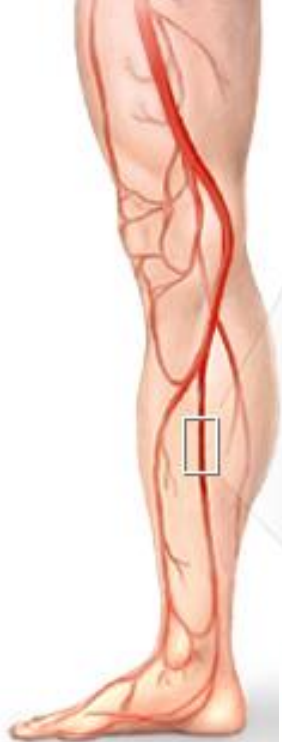
Wear correct fitting footwear



Arteries become narrowed and blood flow decreases in arteriosclerosis



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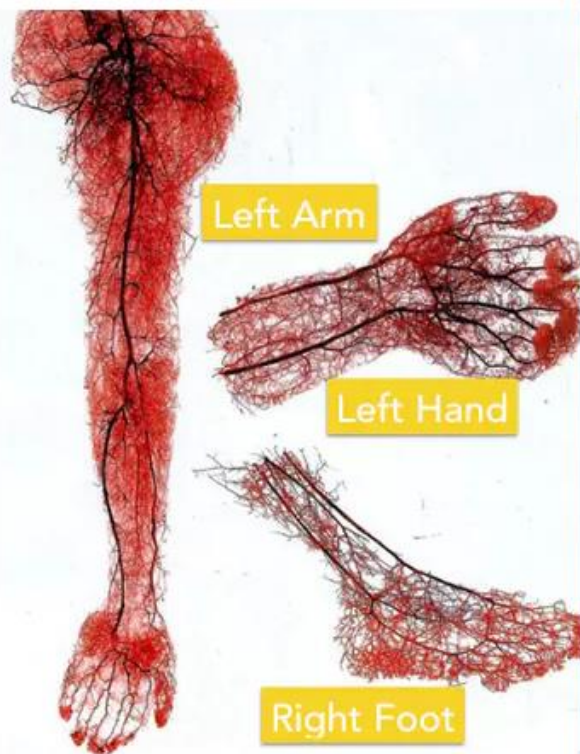


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The really thin tubes that carry blood in this image are capillaries.

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Left Arm

Left Hand

Right Foot

image source: Bodies Revealed

# Global Recommendations on Physical Activity for Health

## 18–64 years old



These guidelines are relevant to all healthy adults aged 18–64 years, unless specific medical conditions indicate to the contrary, irrespective of gender, race, ethnicity or income level. They also apply to individuals in this age range with chronic noncommunicable conditions not related to mobility such as hypertension or diabetes. These recommendations can be applied to adults with disabilities. However they may need to be adjusted for each individual based on their exercise capacity and specific health needs. Pregnant, postpartum women and persons with cardiac events may need to take extra precautions and seek medical advice before striving to achieve the recommended levels of physical activity for this age group.

Strong evidence demonstrates that compared to less active adult men and women, individuals who are more active:

- have lower rates of all-cause mortality, coronary heart disease, high blood pressure, stroke, type 2 diabetes, metabolic syndrome, colon and breast cancer, and depression;
- are likely to have less risk of a hip or vertebral fracture;
- exhibit a higher level of cardiorespiratory and muscular fitness; and
- are more likely to achieve weight maintenance, have a healthier body mass and composition.

### Recommendations:

In adults aged 18–64, physical activity includes leisure time physical activity, transportation (e.g. walking or cycling), occupational (i.e. work), household chores, play, games, sports or planned exercise, in the context of daily, family, and community activities.

The recommendations in order to improve cardiorespiratory and muscular fitness, bone health, reduce the risk of NCDs and depression are:

1. Adults aged 18–64 should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week **or** do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week **or** an equivalent combination of moderate - and vigorous-intensity activity.
2. Aerobic activity should be performed in bouts of at least 10 minutes duration.
3. For additional health benefits, adults should increase their moderate-intensity aerobic physical activity to 300 minutes per week, **or** engage in 150 minutes of vigorous-intensity aerobic physical activity per week, **or** an equivalent combination of moderate - and vigorous-intensity activity.
4. Muscle-strengthening activities should be done involving major muscle groups on 2 or more days a week.

Inactive people should start with small amounts of physical activity and gradually increase duration, frequency and intensity over time. Inactive adults and those with disease limitations will have added health benefits when they become more active.

For further information see: <http://www.who.int/dietphysicalactivity/pa/en/index.html> or contact WHO on [dietandhealth@who.int](mailto:dietandhealth@who.int)

# How to look after your feet

Stay warm

Toenail cutting

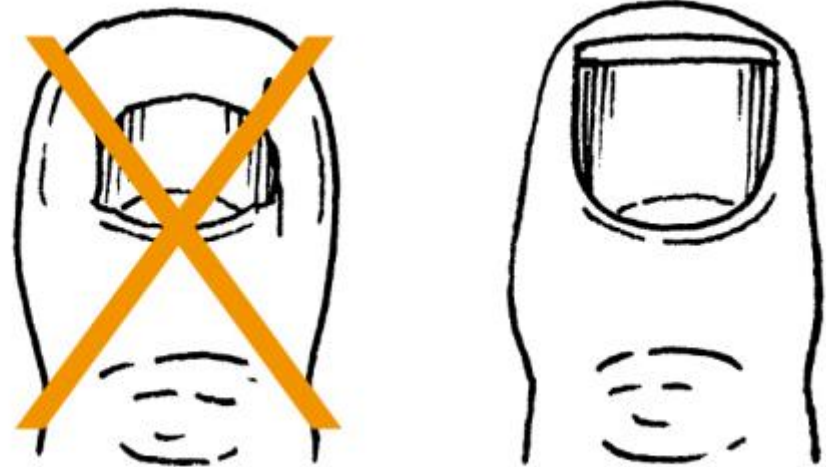
Use moisturiser regularly – Avoid between toes

Lightly use a foot file

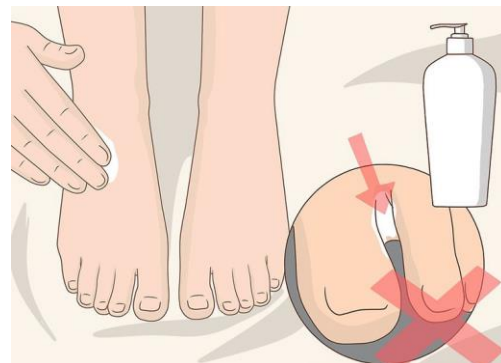
Never use medicated corn pads

See your podiatrist regularly

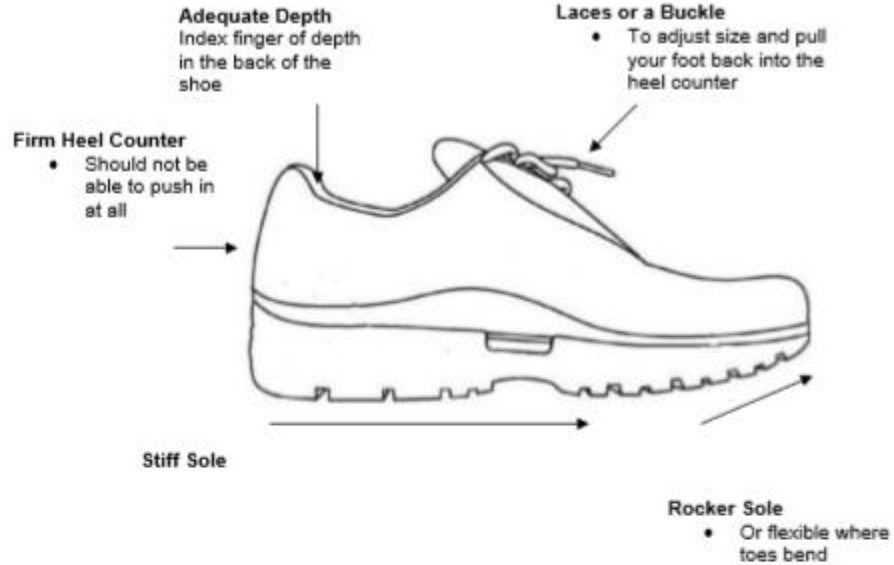
Wear correct fitting footwear



[iwgdfguidelines.org](http://iwgdfguidelines.org)



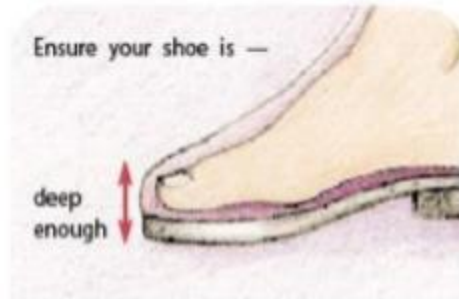
# Guide to Supportive Footwear



iwgdfguidelines.org

Make sure there is a thumb width between your longest toe and the end of the shoe.

Should be able to wiggle toes in the end of the shoe.



[www.complexfootsolutions.com.au](http://www.complexfootsolutions.com.au)

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# Where to find help

GP for general problems

Enhanced Primary care Plan

Podiatrist

- Make sure they know you have scleroderma and know how that affects your feet
- More frequent but less debridement/nail care
- Manage deformities
- Regular foot and footwear reviews
- If you have a wound...

Rheumatologist

Scleroderma clinic Monash Health  
Clayton

- Undiagnosed may be triaged into the general rheumatology clinic first
- Aim to see infected/painful ulcers or PAH or ILD as a priority
- Referrals through the GP should be sent to Monash Health intake addressed to Rheumatology – Eric Morand
- Fax: 9594 2273



# Take home messages

Prevention is way better than cure

Look after your skin and nails

Stay healthy + exercise

**JUSTIN BRADLEY**

podiatrist

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W. [www.complexfootsolutions.com.au](http://www.complexfootsolutions.com.au)

