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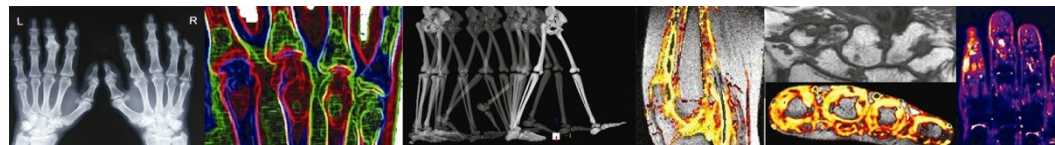
# Foot Pain in Scleroderma

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**20<sup>th</sup> Anniversary Scleroderma Family Day**

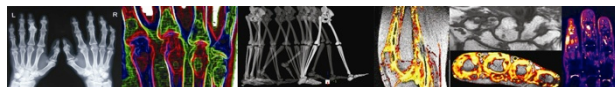
**16th May 2015**



# Presentation Content

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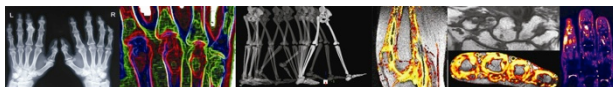
- Introduction
- Different types of foot pain
- Factors contributing to foot pain
- Impact of foot pain on Quality of Life (QoL)



# Scleroderma

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- Clinical features of scleroderma
  - Microvascular (small vessel) and macrovascular (large vessel) damage
  - Fibrosis of the skin and internal organs
  - Dysfunction of the immune system
- Unknown aetiology
- Female to male ratio 4.6 : 1
- The prevalence of SSc in the UK is 8.21 per 100 000



# Foot Involvement in SSc

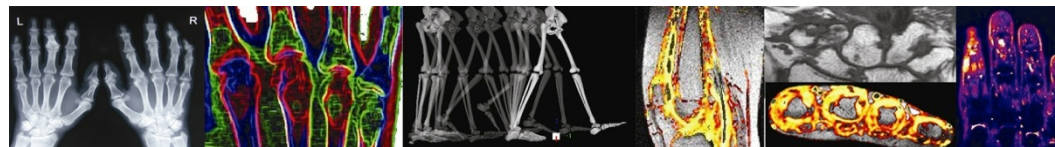
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- Clinically 90% of SSc patients have foot involvement
- It typically has a later involvement than hands
- Foot involvement is less frequent than hand involvement, but is potentially disabling



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# Different Types of Foot Pain



# Ischaemic Pain (vascular)

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## *Microvascular disease (small vessel)*

### ■ Intermittent pain

#### – Raynaud's (spasm)

- Cold
- Throb
- Numb
- Tingle
- Pain

### ■ Constant pain

#### – Vessel center narrows

- Distal pain (toes)
- Gradually increasing pain
- Intolerable pain when necrosis is present



# Ischaemic Pain (vascular)

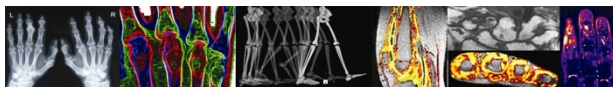
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## *Macrovascular disease (large vessels)*

### ■ Intermittent and constant pain

#### – Peripheral Arterial Disease

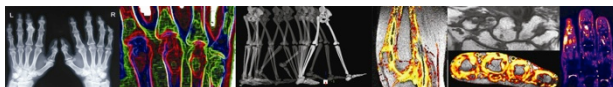
- Intermittent claudication
  - Muscle pain (ache, cramp) during walking
- Aching or burning pain
- Night and rest pain
- Cramps



# Ulcer Pain

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- Ulcer development
  - Constant pain
  
- Infected ulcer
  - Unexpected/ excess pain or tenderness





# Neuropathic Pain

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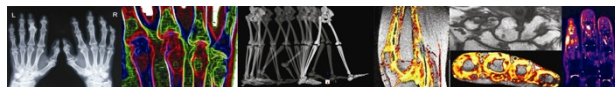
- Nerve damage is not always obvious.
- Usually worse in the feet than in the hands.
- Neuropathic symptoms include:
  - Lancing pains
  - Burning
  - Allodynia (pain from a stimulus that does not usually causes pain)
  - Paraesthesia (pins and needles)
  - Pruritus (itching without a rash)
  - Numbness



# Musculoskeletal (MSK) Pain

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- MSK pain is aggravated during activity
- Myalgia (muscle pain)
  - generalised muscle ache
  - muscle tenderness
  - cramps
- Arthralgia (joint pain)
  - polyarthritis (many joints)
  - symmetrical arthropathy
  - stiff and painful joints
  - chronic or intermittent



# Musculoskeletal pathology

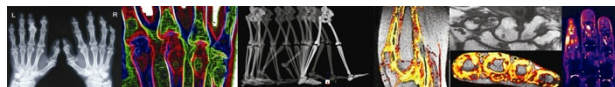
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- Within the joint

e.g. Erosion, dislocation of digits, joint space narrowing

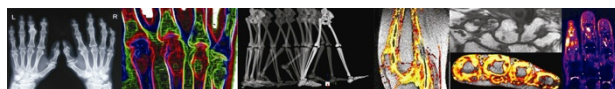
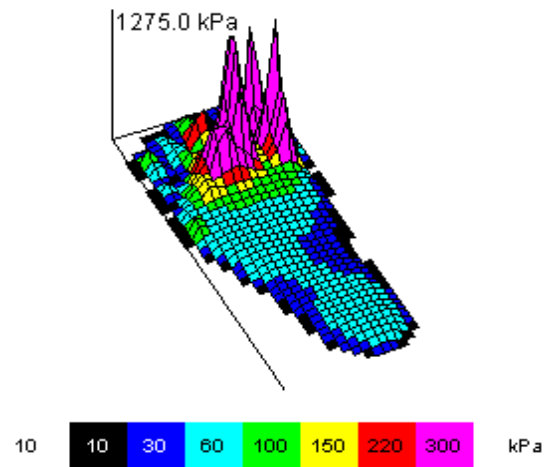
- Around the joint

e.g. Flexion contractures, tendon friction rubs, tenosynovitis and tendonitis.



# Areas Affected by Plantar Pressure & Pain

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# Other Causes of Foot Pain:

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Callus



Corn



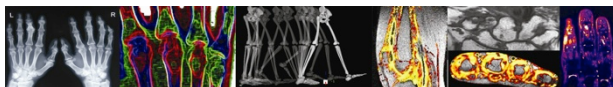
Scar tissue



Calcium deposits

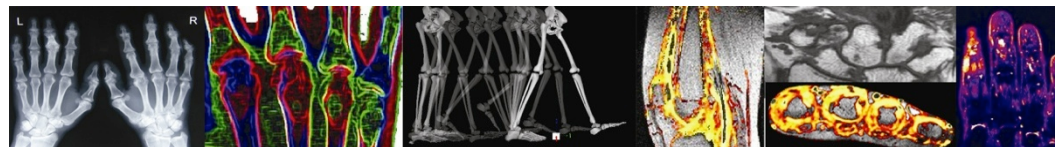


Skin fibrosis



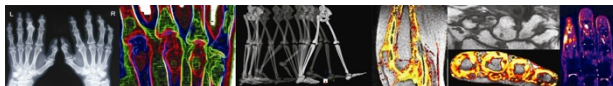
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# Factors Contributing to Foot Pain



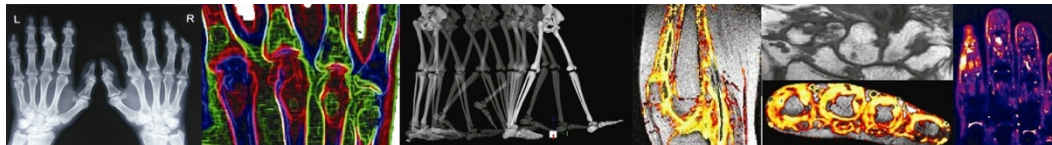
# Factors Contributing to Foot Pain

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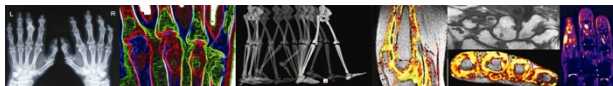
# Impact of Foot Pain on Quality of Life





# Factors Contributing to QoL

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# Summary

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- Foot pain in scleroderma can be caused by vascular, neurological or musculoskeletal problems – which interact.
- The factors contributing to the impact of foot pain are both physical and psychological.
- Foot pain and foot function are within the most influential factors to impact on overall QoL.

