The challenge of diabetic foot care.

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The challenges...???
Feet – aghhh….!

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Feet – ughhh....!
“Every 30 seconds a lower limb is lost to diabetes somewhere in the world…”

In the UK:
Around 5,000 people with diabetes undergo leg, foot or toe amputations each year, equivalent to 100 per week.
‘Diabetic Foot Ulcer’ Facts…

- “People with diabetes are up to 40 times more likely to undergo lower extremity amputation than people without diabetes.”
- “Approximately 15% of all people with diabetes will have a foot ulcer at least once during their lifetime.”
- “Up to 85% of all amputations begin with an ulcer.”

Bakker K, Time to Act; Diabetes and Foot Care International Diabetes Federation, International Working Group on the Diabetic Foot. 2005 p32
‘Diabetic Foot Ulcer’ Facts…

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× “Up to 85% of all amputations begin with an ulcer.”

× “Studies have shown that foot ulcers can be prevented and successfully treated. It is likely, therefore, that many amputations are also preventable.”

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Set the Scene…

- Build on your existing skills and knowledge
- Describe a practical, structural approach based on best evidence
Clinical Features.....
DIABETES

ISCHAEMIA

Macrovascular (Large vessel disease)

Microvascular (Small vessel disease)

Ulceration
Ischaemia

Photograph is reproduced with kind permission of E.Gibson, Tissue Viability Nurse, East Sussex NHS Trust, UK.
DIABETES

NEUROPATHY

- Autonomic
  - Dry skin
  - Fissures

- Sensory

- Motor
  - Deformity

Ulceration
Neuropathy

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DIABETES

ISCHAEMIA

- Macrovascular (Large vessel disease)
- Microvascular (Small vessel disease)

- Ulceration

NEUROPATHY

- Autonomic
  - Dry skin
  - Fissures
- Sensory
- Motor

- Deformity
- Ulceration

Microvascular (Small vessel disease) and Macrovascular (Large vessel disease) can lead to Ulceration. Autonomic neuropathy results in Dry skin and Fissures. Sensory neuropathy and Motor neuropathy lead to Ulceration and Deformity, respectively.
Neuro-Ischaemic Foot
Why is the diabetic foot vulnerable?

- Vascular disease
- Nerve damage
- Underlying susceptibility to infection
- Hyperglycaemia
Foot Assessment...
Assessment

1. Testing of foot sensation using 10g monofilament
2. Palpation of foot pulses
3. Inspection for any foot deformity
4. Inspection of footwear
…..the ‘Mop’ test

- **M**onofilament 10g
- **O**bservation foot / toe deformities and footwear
- **P**alpation of foot pulses
‘M’ – Monofilament... Testing of foot sensation

- Avoid hard skin
- Test 3 sites per foot
- If 2 out of 3 absent, there may be sensory loss
- If no monofilament, use ballpoint pen
‘O’ – Observation…

- High arches
- Clawed toes
- Bunions

Will all give high pressure / friction areas at site of ulcer

FOOTWEAR…
Slip-on vs lace up.
Shallow, tapered toe vs deep round toe area…
Thin hard soles vs cushioned soles
‘P’ – Palpation of pulses...

- Feel for 2 pulses per foot
- If both absent there may be ischaemia...

- Tri-phasic
- Bi-phasic
- Monophasic
Information you now have

- A loss of feeling
- Poor circulation
- A foot shape that is causing pressure / friction areas inside their footwear
- Footwear that is causing pressure / friction against the foot
Next Steps…
MDT Approach....a climate that fosters collaborative care!

- DN
- TVN
- Dietician
- Patient
- Orthotist
- Vasc Surgeon
- GP
- Podiatrist
Management - 6 key aspects....

Multidisciplined Framework

- Microbiological Control
- Wound Control
- Vascular Control
- Mechanical Control
- Metabolic Control
- Educational Control
The Challenge…

- DFU represents great challenge because:
  - Neuropathy & lack of protective pain sensation
  - Ischaemia
  - Poor immune system
  - Patients with poor eyesight

“LOCATION, location, location…..”
Conclusion…

- Catch them early
- Treat Aggressively
- Watch out for subtle signs of infection
- Referral… Do it EARLY…!
The Challenge....!