Risk of What?

At risk of having an active Diabetic foot problem

Ulceration

Spreading Infection

Critical Limb Ischemia

Charcot arthropathy

Gangrene
Why do we risk score ???

- Comply with NICE Guidelines
- Knowing who and when to refer to specialist service
- To guide health care teams on when to reassess
- Inform / educate the patient
- Prevent ulcerations
- Prevent amputations
Background

Diabetes is the most common cause of non-traumatic limb amputation, with diabetic foot ulcers preceding more than 80% of amputations in people with diabetes. Mortality rates after a diabetic foot ulceration and amputation are high, with up to 70% of people dying within 5 years of having an amputation and around 50% dying within 5 years of developing a diabetic foot ulcer. This high mortality rate is believed to be associated with cardiovascular disease and emphasises the importance of good diabetic and cardiovascular management. NICE cg19 2015

The risk of foot problems in people with Diabetes is increased. Why?

Neuropathy (nerve damage or degeneration)

Peripheral arterial disease (poor blood supply due to diseased large and medium sized blood vessels in the legs)

Or both
Risk Factors
Neuropathy

Using a 10g monofilament as part of the foot sensory examination

**Loss of protective sensation**: Inability to sense light pressure e.g. as applied with a 10 gram monofilament – IWGDF Definitions and Criteria
Sensory Testing

The only piece of equipment that is required to carry out a simple, evidence based, foot screening is a 10g monofilament – (Frame)

First apply the monofilament on the patient's hand (or elbow or forehead) to demonstrate what the sensation feels like
Apply the monofilament perpendicular to the skin surface.
Apply sufficient force to cause the filament to bend or buckle.
The total duration of the approach - skin contact and removal of the filament - should be approximately 2 seconds.
Apply the filament along the perimeter of, not on, an ulcer site, callus, scar or necrotic tissue.
Do not allow the filament to slide across the skin or make repetitive contact at the test site.
**Non-critical limb Ischaemia**

Assessment of Peripheral Arterial Disease in diabetes patients is complicated.

However there are some clinical tests / signs / symptoms that can help lead us towards or away from a diagnosis of PAD (non-critical limb Ischaemia).

If one foot pulse can be palpitated and there are no other physical signs of lower limb arterial disease then PAD is unlikely.
Symptoms and signs of PAD

- Intermittent Claudication
- Absent pulses
- Low ankle brachial pressure index
- Monophasic signal with doppler
- Skin changes (not always a feature)
Deformity

Structural abnormality of the foot

A non significant structural abnormality of the foot can be described as a very minor change of shape of the foot which does not result in areas of pressure, leading to callus formation, and a difficulty in fitting shoes which could be purchased in high street shops.
Callus
Previous ulceration

Previous ulceration is defined as an area that has previously been ulcerated but has subsequently healed. After ulceration the affected area never repairs itself completely and only returns to 70% of tensile strength. This area is always vulnerable to future ulcerations. Previous ulceration is the highest risk factor for future ulceration.
Previous Amputation
On renal replacement therapy

• High risk – ng 19
• High risk – IWGDF
Adding up the risks
Active diabetic foot problem
- ulceration or
- spreading infection or
- critical limb ischaemia or
- gangrene or
- suspicion of acute Charcot arthropathy, or an unexplained hot, red swollen foot with or without pain.

High risk
- previous ulceration or
- previous amputation
- on renal replacement therapy or
- neuropathy and non-critical limb ischaemia together or
- neuropathy in combination with callus and/or deformity or
- non-critical limb ischaemia in combination with callus and/or deformity

Moderate risk
- deformity or
- Neuropathy or
- Non-critical limb ischemia

Low Risk
- No risk factors present except callus alone
Thank you all for listening. Questions?