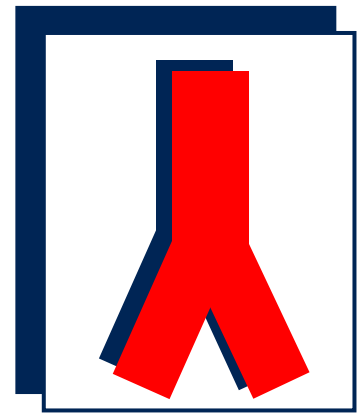


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General Practitioner Information: Managing the feet of diabetics

Diabetic foot disease is a growing problem in society today, the increase in number of diabetics is one factor, another is the growing awareness that this is a condition that is associated with a high mortality and morbidity. It will cost the Australian community more than \$2 billion annually. In addition to these direct costs there are the indirect costs to the individual like lost employment, loss of enjoyment of life and a high risk of amputation. Australia performs badly in this respect in comparison to it's international peers.

TAKE THE SHOES OFF

The most important first step in tackling this problem is to raise the awareness of it with our patients. This means whenever we see a diabetic patient in our practices or hospitals, we need to discuss their feet with them, examine them and explain the importance of good foot care. Unfortunately, this mean we have to get the to take their shoes off.

The at risk foot

This is a term that defines a patient whose foot is at risk and requires extra care:

- Absent pulse or pulses
- Diminished sensation
- Deformity of toes or foot – collapse of midfoot, hammer toes

Patients with any of these things should be regarded as at risk and a plan should be put in place to manage their feet. This should involve:

- Regular GP visits to check on their feet
- Optimal diabetic management
- Regular foot care from a podiatrist
- Including a family member in the plan to check on the feet
- A discussion about footwear

Patients who do not appear to have at risk feet should still be encourage to take care and be seen regularly by their GP.

The High risk foot

This is any foot that has had previous ulceration. The incidence of future ulceration is 45% in the first year and almost inevitable lifelong.

- They should be seen by a multidisciplinary high risk team that includes a vascular surgeon, podiatrist, GP and endocrinologist.
- They should be encouraged to purchase specially fitted shoes made for them.
- They should never walk out of the house without shoes on.
- They should be sent to hospital promptly with any suggestion of a foot problem.
- A member of their family of care team should inspect their feet daily.

Who will I intervene on?

There is no role for intervention other than prevention in an asymptomatic patient.

Any patient with a new or chronic diabetic foot wound in whom pulses are not palpable should be evaluated. Usually that will involve an angiogram to look for opportunities to improve their circulation. Patients with a palpable popliteal pulse will normally proceed direct to angiography whereas those with absent femoral or popliteal pulses will get a duplex to plan the intervention.

It is reasonable in a patient with a new infection to wait a little to see if the problem heals spontaneously as many diabetics will heal their feet despite an absent pulse. The period of conservative care should be closely monitored and brief (2 to 4 weeks only).

Any infection should be treated promptly and I have a low threshold for bringing these patients into hospital for a period of IV antibiotics.

Acute infection

In any patient who presents with an acute infection in the foot there should be a very good reason not to

admit them to hospital for intravenous antibiotics immediately. The sooner we can get on top of any infection the less likely it is that there will be complications like osteomyelitis and gangrene that may require debridement or amputation of toes. Once this occurs the risk of subsequent ulceration and or more extensive amputation is much higher, whereas if we can abort the infective episode early it is possible to prevent future problems.

- Any diabetic patient who injures their foot should be taken very seriously indeed even if there are no "at risk" signs. For penetrating injuries antibiotics should always be prescribed and xrays should be requested early. Early follow up is essential.

MRI of the foot

This is an increasingly common investigation. In my practice I have not found it to be especially helpful. In most patients it seems to add very little to a clinical examination and a plain x-ray.

- If the plain x-ray suggests a diagnosis of osteomyelitis it is unlikely that the MRI scan will provide enough evidence to change this.
- If there is a chronic ulcer overlying bone or a joint and the x-ray is clear, then an MRI will not usually give me any more information to mandate an amputation.
- It can be very difficult to distinguish between soft tissue infection and oedema on an MRI.

The places where they are helpful is in patients with a swollen painful foot that we think is not due to infection or a patient or in a patient in whom we are planning some bony reconstruction to exclude any infection. In general, I feel MRIs of the feet should only be done when a patient is admitted or as part of a complex workup to plan amputation or reconstruction.

Who to refer:

To podiatrist: All diabetics once they are able to engage with the problem that is foot disease.

To endocrinologist: All patients with at risk foot whose HbA_{1c} is not controlled.

To neurologist: Patients with troubling peripheral neuralgia.

To vascular surgeon: patients with non-healing ulcers or osteomyelitis, patients with absent pulses with any symptoms suggestive of vascular insufficiency. Also,

any patient in whom orthopaedic foot surgery is planned but have had prior vascular intervention or have absent pulses.

To orthopaedic surgeon: Patients with normal pulses who may benefit from surgery to correct their foot deformity.