Diabetes foot care
Information sheet - advice for patients and carers

Understanding diabetes
Diabetes is a condition where the level of the sugar in the blood is not controlled effectively by the body. Sugar accumulates in the blood and uncontrolled sugar levels can cause damage to the body including the feet in a number of ways. Diabetes may not affect your feet, but there are three main ways in which it could and these can exist together or separately. They are:

Poor circulation
This is called ischemia. It occurs when the large blood vessels or arteries have their inner walls covered by a fatty substance which causes them to narrow. This means there is less room for the blood to flow down to the foot. There may also be some changes to your small blood vessels as well which can affect your toes. In severe cases a blockage can occur. Smoking makes this problem much worse. A good blood supply is essential to maintain healthy skin and tissues, and also to heal any open wounds. Blood supply checks can be carried out easily by feeling for pulses in the foot and this should be carried out routinely by your practice nurse or podiatrist.

Impaired sensation
This is called neuropathy. It is where the nerves in the foot and sometimes lower leg have been damaged by diabetes. You may be unable to feel sharp objects or tell the difference between hot and cold. The skin can often appear dry. Your practice nurse or podiatrist can perform a simple test that will identify any problems. This should be done regularly.

Changes in foot shape
This is likely to occur in association with reduced sensation or neuropathy. The nerves controlling your muscles may stop working
effectively and this can result in ‘clawing’ of the toes. The balls of your feet may also become more prominent. This can cause a change in the way you stand and walk, causing abnormal pressure areas and calluses.

Other complications:
Charcot foot
Charcot foot is a rare complication of diabetes that occurs in those with peripheral neuropathy (nerve damage/loss of sensation in the feet) and who have a good blood supply to the feet. When neuropathy is present, the bones in the foot become weakened and can fracture easily, commonly as a result of a minor injury. As the neuropathy is present, the pain goes unnoticed so further damage can occur as weight is continued to be placed on the foot. This can lead to severe deformities of the foot. Early diagnosis and treatment is vital as Charcot foot can be extremely disabling.

What are the symptoms of Charcot foot?
Early signs of Charcot foot that may appear soon after injury include:
A red, hot, swollen foot
Aching in some cases, although there is usually no pain.

Ulcerated foot
This is when a wound on your foot, normally caused by trauma, has not healed properly.

Skin infections
You may be at greater risk of getting an infection of the skin in your feet or lower legs, especially if your diabetes is poorly controlled or you have neuropathy. This is because you may not realise you have developed an infection until it is already widespread and harder to treat.

What causes an infection?
An infection occurs when the body is unable to protect itself from micro-organisms (such as bacteria, viruses and fungi).
Signs of an infection on the skin

<table>
<thead>
<tr>
<th>Colour</th>
<th>White skin will usually be bright pink or red, brown or black skin may become darker</th>
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</thead>
<tbody>
<tr>
<td>Pain</td>
<td>The infected area may throb and be very painful (though this may not be the case if you have neuropathy)</td>
</tr>
<tr>
<td>Swelling</td>
<td>The infected area may be puffy and appear swollen</td>
</tr>
<tr>
<td>Movement</td>
<td>The pain and swelling may mean that it becomes difficult to move the infected area (though this may not be the case if you have neuropathy)</td>
</tr>
<tr>
<td>Temperature</td>
<td>The infected area may feel hot to the touch</td>
</tr>
<tr>
<td>Pus</td>
<td>The area may be weeping a yellow/green matter called pus; dead cells and micro-organisms.</td>
</tr>
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How to prevent foot problems:

A yearly foot screen
Once a year, both feet should be checked by your practice nurse. They should assess the circulation and the sensation in both feet. If any concerns are found, you will be referred to the community podiatry service for a review and more frequent foot assessments if needed.

General measures
Ensure that you do all that you can to maintain good control of your blood sugar level and it is very important that you do not smoke.

Daily foot checks
You may be unaware of injury to your feet and therefore an essential part of your daily routine must include a foot check.
How to look after your feet:
Socks and hosiery
Natural fibres such as cotton or wool are preferable. These should be changed every day.

Footwear
Always ensure that your shoes have a wide round, deep toe box and compare the shape of your toes with that of the shoe. A lace or buckle fastening is best but velcro straps are acceptable if you have difficulties with laces or buckles. A quarter inch space between the end of your longest toe and the end of your shoe is ideal. If your feet swell, take care not to lace, buckle or fasten too tightly. The height of the heel should not be more than one inch and leather uppers are preferred. If possible have your feet measured before buying shoes.

Heat
If you have neuropathy your feet may not be able to tell hot from cold. It is advisable not to use hot water bottles or to warm your feet in front of a fire. Burns can occur which may not heal easily.

Do not:
• Ignore any problems with your feet that you are not sure about. If there is a distinct colour change, any swelling, pain, heat or other abnormality, seek professional help immediately. We will be happy to see and advise you.

• Use razor blades or sharp implements to remove hard skin.

• Use corn plasters. These may contain acid, which is harmful to your skin.

• Wear badly fitting footwear.

• Walk barefoot.

• Use hot water bottles or expose your feet in front of the fire.

• Wash your feet in strong disinfectants.
In an emergency

- In the event of a minor injury to the foot, cleanse with warm salt water, dry foot carefully with a soft clean towel without touching the actual wound and then cover with a dry dressing. Change dressing daily. If healing does not occur within three days, please seek advice from your doctor or contact the podiatry service.

- If you are aware of any colour change, excess heat, pain swelling, change in foot shape or fluid of any type, please contact your doctor or the podiatry service.

- If for any reason, there are problems in contacting us, please telephone your GP immediately.

<table>
<thead>
<tr>
<th>Low</th>
<th>Normal sensation and normal circulation</th>
<th>Annual diabetic foot assessment with practice nurse. (Not eligible for routine NHS nail cutting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased</td>
<td>Neuropathy or poor circulation</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>Neuropathy or poor circulation plus foot deformity, skin changes or previous foot wound</td>
<td></td>
</tr>
<tr>
<td>Ulcerated</td>
<td>Wound</td>
<td></td>
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</table>

Contact us
Oxleas Adults’ Community Greenwich Podiatry Service

0208 320 3550
Monday – Friday
8:30am – 4:30pm

It is not always possible for us to answer the phone straight away. Please leave a message and your call will be returned. Please let us know if you require an interpreter or have any additional needs.