

## **DIABETES AND YOUR FEET**

Diabetes is a condition in which there are elevated levels of glucose (sugar) in the blood. Normally, a substance known as insulin transports glucose from the blood to the cells to provide energy. In diabetes there is either a complete lack of insulin or the insulin that is produced doesn't work properly. This means that too much of the glucose remains in the blood rather than being transported to the cells. There are many effects that diabetes has on the body particularly in the feet. Some other effects of diabetes, including vision impairment and kidney damage, may contribute to problems experienced in the feet.

There are two main ways that diabetes affects the feet: these are the circulation and nerve function.

### **Circulation:**

Blood is supplied from the heart to all parts of the body through tubes called arteries. The presence of diabetes increases the risk of blockages in the arteries which will then decrease the amount of blood that gets through. As the feet are furthest away from the heart, they tend to be affected first. This results in what is commonly referred to as poor circulation. Possibly the most relevant implication of poor circulation is that wound may take longer to heal. There is also an increased susceptibility to infection and the body may not be as effective in fighting off the infection.

### **Nerve function:**

The second way that diabetes affects the feet is in the form of impaired nerve function. Nerves have many purposes, one of which is to report pain in the event of injury. The most common effect that diabetes has on nerves is to decrease their ability to report pain. The danger of this impaired or absent sensation is that it is possible to injure the foot without knowing it. Obviously, if you are unaware of the injury you are unlikely to treat it and it is these untreated injuries that cause problems. The nerves controlling muscle movement in the foot may also be affected resulting in changes to foot shape. Nerves regulating the function of sweat glands in the feet can also be damaged leaving the skin dry and scaly.

Not everyone with diabetes will develop these complications. Whether you do or not depends largely on how early the diabetes was detected and how well the blood glucose levels are controlled. Even if one or more of these complications do develop, they do not necessarily spell disaster. Precautions can be taken to protect your feet from the results of poor circulation or impaired nerve function. An assessment of your feet by your podiatrist can let you know how much effect the diabetes has had on the feet and what action needs to be taken.

## **GENERAL FOOTCARE ADVICE FOR DIABETICS**

The following advice will help you maintain healthy feet.

- Inspect feet daily for cuts, scratches, redness, swelling or anything, that wasn't there yesterday. A mirror can be used to view the sole of the foot. Also, check inside shoes with hands for any objects, which may harm the feet.
- Wash feet daily in luke warm soapy water. Carefully pat dry, especially between the toes. Moist skin is fragile and therefore more likely to crack. It also encourages fungal infections like tinea. Methylated spirits may be applied to unbroken, moist skin to dry it out.

- Apply a moisturizing cream, eg. Sorbolene, to the feet (**but not between the toes**) each day. This will keep the skin soft and supple, which is important, as dry skin is also fragile and likely to crack.
- If you are cutting your toenails, cut them straight across and file sharp edges. Avoid cutting and probing into the corners of the nails as this will encourage them to become ingrown.
- Corns and callouses are best treated by a Podiatrist, although a pumice stone may be used to gently remove callouses. **NEVER** use chemical corn cures as they contain chemicals that may be harmful to the skin.
- Wear well fitting shoes made from natural fibers to allow better circulation of air. Take care that there are no creases in the socks and they are not so tight that they cut off circulation.
- Avoid extremes of temperature. Check the temperature of the shower or bath with elbow first and avoid placing feet in front of heaters – wear warm socks instead.
- If you discover a cut or scratch on your foot, wash it with warm salty water and pat dry gently. Apply an antiseptic cream (eg. Betadine) and cover with a padded dressing (eg. Handypor or Cutiplast). If it is not improving within 3 days or if there is any pus present, please contact us immediately or consult your doctor. If you are unsure about the condition of your feet, don't hesitate to seek help – it is better to be safe than sorry.