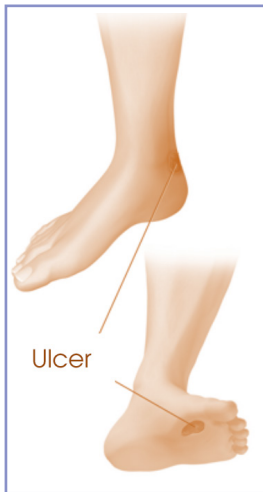


# COMPLICATIONS OF DIABETES: THE DIABETIC FOOT

## WHAT IS THE DIABETIC FOOT? D



- > The **diabetic foot** is one of the most common, expensive and serious **complications** of diabetes. It entails long stays in hospital and a great deal of pain for patients.
- > It is characterised by superficial skin lesions which, over time, can turn into **gangrenous ulcers**, with subsequent death of the affected tissues (necrosis).
- > If these ulcers do not improve through treatment, they can result in **the amputation of a toe, a foot or part of the leg**.
- > **Amputation** (which is usually performed to prevent the spreading of the infection all over the body) **is 10-20 times more common** in people with diabetes than those without diabetes.
- > Good **foot care** is an **essential factor in helping to prevent the onset of serious infections, gangrenous ulcers and amputations**.

## WHAT ARE THE MAIN CAUSES OF THE DIABETIC FOOT? D

**Over time, high levels of blood glucose** (glycaemia) **can damage both the nerves** (diabetic neuropathy) **and blood vessels** (arteriopathy) in your feet. In particular, **diabetic neuropathy** affects the nerve sensory ability of the feet **causing tingling, numbness** and **loss of sensitivity**.

- > **The loss** of sensitivity in lower limbs may increase the risk of not feeling cuts or wounds that, if not promptly treated, may cause **infection**.
- > **The limited blood supply**, due to blood vessels in the feet being damaged by diabetes, makes the healing process more difficult, resulting in the increased risk of infection and gangrene.

The nerve damage can also lead to foot and toe **deformations** as in the Diabetic **Charcot foot** condition, the main symptoms of which include redness, swelling and weakening of the bones in the foot. Those affected by this condition suffer from the characteristic "**rocker bottom**" foot.

## HOW DO YOU PREVENT THE DIABETIC FOOT? D

Approximately 49-85% of all diabetic foot-related problems can be prevented:

- > A **careful check of blood glucose levels may prevent or delay the onset of complications** (e.g. peripheral neuropathy) causing the diabetic foot.
- > A **complete foot examination at least once a year (more often in the case of evident problems)** can help prevent complications associated with the diabetic foot, including slow wound healing, ulcers and amputation.
- > **Foot care** is a very important factor in the prevention of the diabetic foot; this includes a daily check of your feet (in order to identify any cuts, injuries or wounds), correct daily hygiene and the use of comfortable shoes and socks.
- > **Doing physical exercise and refraining from smoking** both help to improve blood supply to the feet.

**REFERENCES:** American Diabetes Association (<http://www.diabetes.org>); International Diabetes Federation (<https://idf.org>); Istituto superiore di Sanita- Epicentro (<http://www.epicentro.iss.it>); Khan Y et al. Int J Res Med Sci. 2017 Nov; 5(11):4683-9; National Institute of health-National Institute of Diabetes and Digestive and Kidney Diseases- Genetic (<https://www.niddk.nih.gov>).

