Nerve related complications

When the blood vessels supplying the nerves of the body become damaged as a result of raised blood sugar, blood and nutrients are not able to reach these nerves in adequate amounts and they become damaged. This is called neuropathy. Several groups of nerves are affected by type 2 diabetes in different ways.

- **Peripheral nerves:** The peripheral nerves are the group of nerves that are outside the brain and spinal cord. They supply the upper and lower extremities like the hands and legs. They are the group of nerves that are most affected by diabetes. Insulin resistance and the associated metabolic syndrome increases the risk of developing diseases of the peripheral nerves. Hence, the damage to peripheral nerves as a result of raised blood sugar may begin before the signs and symptoms of type 2 diabetes manifest.
  Common symptoms of damage to the peripheral nerves from diabetes include numbness, pain, tingling sensations, loss of the ability to feel hurt or changes in temperature etc.
  - Unpleasant or painful burning and tingling sensations show that small fibres are involved.
  - Numbness and loss of protective sensations (not being aware of pain) show that large fibres are involved. Loss of protective sensation is a serious risk factor for diabetic foot ulcers.
- **Autonomic nerves.** The nerves of the body that supply vital organs in the heart, digestive system, urinary system etc are called autonomic nerves. These nerves function automatically to ensure that the vital organs function involuntarily to keep us alive in good health. Damage to these autonomic nerves causes problems in how internal organs function. This leads to heart problems, digestive problems, urinary problems etc. Common symptoms are; fast heartbeats even when at rest (resting tachycardia), low blood pressure on standing (orthostatic hypotension), constipation, diarrhea, not being able to control the urge to go to defecate (fecal incontinence), erectile dysfunction, urgency to urinate, frequent urination and sometimes retention of urine (neurogenic bladder), sudomotor dysfunction with either increased or decreased sweating.

Detecting nerve related complications

It is important to detect nerve related complications at a very early stage to prevent further progression. This is because they are a serious indicator for diabetes related foot complications which is the most common cause of lower limb amputations.

Discuss with your doctor to have a full sensory and foot examination at every appointment