

# Diabetes Complications: Small Blood Vessel Disease

High blood glucose levels can damage the blood vessels everywhere in your body, including the small blood vessels. Over time this damage can cause very serious health problems.

Small blood vessels carry oxygen and nutrients throughout your body, including to your eyes, nerves and kidneys to keep them healthy and working well.

But when you have Type 2 Diabetes, high levels of glucose, a form of sugar, and other substances in your bloodstream can thicken your blood and cause damage to your small blood vessels.

High blood pressure can make this problem worse. When you have high blood pressure your blood is moving at a greater force through the small, fragile vessels of your body, causing damage. When you have diabetes it is important to check your blood pressure on a regular basis and keep it in control.

In the eyes, high blood glucose can cause the tiny blood vessels of the retina, at the back of your eye, to leak or rupture, interfering with vision. This is called diabetic retinopathy.

At first you may not notice any symptoms of diabetic retinopathy, but once you do begin to notice, it may be too late. Eventually, if left untreated, diabetic retinopathy can cause blindness.

If your blood glucose levels are not in control you are also at an increased risk of developing cataracts and glaucoma, which can also affect your eyesight.

That's why it is important to see an ophthalmologist every year for a complete eye exam to help diagnose problems early, so that they can be treated.

To slow the progression of eye disease and prevent vision loss, keep your blood glucose levels in a healthy range and talk to your ophthalmologist about your options. There are treatments available that can help if the condition is detected early.

High blood glucose levels can also damage the small blood vessels that supply your nerves. Nerves transmit messages throughout your body to your brain.

Damage may cause some nerve cells to lose their ability to transmit signals as they once did. This is called neuropathy.

Neuropathy can cause pain, loss of sensation, and muscle weakness, usually in the hands, legs and feet. Neuropathy can also affect how well the heart, bladder, digestive system and sexual organs work.

Let your diabetes care team know if you experience pain in your legs, a feeling of pins and needles; or cold legs, which could mean nerve damage or poor blood flow to the legs and feet.

*"Even the sheet laying on my toes would bother me. I mean it would just hurt; it would tingle like pins and needles on my toes."*

Often, symptoms are minor at first and may go unnoticed for a long time.

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However, if it is diagnosed and treated early, neuropathy can be controlled and you may even be able to slow down its progression.

Meet with your diabetes care team on a regular basis to check for nerve damage.

In the kidneys, millions of tiny blood vessels work to filter waste from your blood. Damage to the small blood vessels of your kidneys, called Diabetic Nephropathy, can cause your kidneys to lose the ability to function properly.

Early kidney disease has very few symptoms but as the disease progresses symptoms include: fatigue or a tired feeling, itching, headache, nausea and vomiting, poor appetite, swelling of the legs, and weight gain from fluid build-up.

Kidney disease can be detected by certain blood and urine tests. Make sure your healthcare provider performs these tests each year, whether you have symptoms or not.

Controlling both high blood pressure and high blood glucose are the two most effective ways to slow kidney damage.

When you have Type 2 diabetes, damage to the small blood vessels in your body can cause serious health problems.

Keep your blood glucose in control and meet with your diabetes care team on a regular basis to check for damage to your eyes, nerves and kidneys. Maintain a healthy lifestyle to avoid serious complications now and in the future.