Diabetic Retinopathy

Diabetic retinopathy is a complication of diabetes, and causes damage to the blood vessels in the retina.

Causes of diabetic retinopathy

Many diabetics – particularly those with poor diabetic control which results in too-high blood sugar levels over long periods of time – have damaged blood vessels in the retina, the tissue lining the back of the eye that detects light and allows us to see. This condition, called diabetic retinopathy, affects up to eight out of 10 patients who have had diabetes for 10 years or more.

Types of diabetic retinopathy

Many people with mild diabetic retinopathy have good vision, but there are two types of sight-threatening diabetic retinopathy: diabetic macular oedema (DMO) and proliferative diabetic retinopathy (PDR). In DMO, fluid leaks out of the tiny damaged blood vessels in the back of the eye, and accumulates in the macula, the central part of the retina which is responsible for seeing fine details and central vision. This leads to swelling of the tissue and blurred vision. Eventually, patients with diabetic macular oedema can develop poor central vision and be unable to read or drive, but the vision to the side usually remains normal. Proliferative diabetic retinopathy is when the retinal blood vessels close resulting in the retina being starved of blood. This causes abnormal and very fragile blood vessels to grow on the surface of the retina which can lead to permanent loss of vision from bleeding into the eye, retinal scarring and retinal detachment.

Treatment for diabetic retinopathy

Regular eye checks are essential for all diabetics, so signs of diabetic retinopathy can be detected as early as possible. If you diabetic and experience blurred vision, you should visit an eye specialist immediately. If you develop DMO, you might require laser photocoagulation, which involves placing tiny laser burns in the area of leakage in the retina which slow the leakage of fluid and reduce the fluid in the eye. This may not significantly improve vision for some patients – although it can stop your vision from getting worse. Other treatments are available and have been shown to benefit patients with DMO, including injections of anti-VEGF drugs such as bevacizumab and ranibizumab. Ask your specialist if these treatments are suitable for you or available to you.