

Diabetic Retinopathy

Diabetic retinopathy is the term given to the effects of diabetes on the eye.

Its importance lies in its ability to threaten vision by damaging the retina, the part at the back of the eye which detects light and movement.

Although you may not have experienced any symptoms, retinal screening may pick up early warning signs of which you are unaware.

This is the main reason why it's important to attend regular screening appointments regardless of any experience of symptoms.

Symptoms some patients experience include blurred vision, sudden loss of vision or floaters (small blobs or specs that appear to float in front of your eye).

However, these symptoms can vary depending on the stage of retinopathy.

We can divide patients into three groups. Group one who have no deterioration due to retinopathy, group two who have developed the earliest stages of retinopathy called background retinopathy and group three who have progressed to more serious stages called proliferative retinopathy or maculopathy.

If you are in the first group which thankfully is the most common by a wide margin, then your photograph shows no signs of the onset of disease and your eye is perfectly healthy.

All you need to do is continue to attend a screening appointment once a year.

Do not wait until your vision changes to attend an eye examination. Early diagnosis of diabetic retinopathy is vital to halting its progression and saving your eyesight from deteriorating further.

About one in three of you will fall into the second category and will have developed early signs of retinopathy. This is called background retinopathy.

At this stage blood vessels in the retina are weakened and can leak which leads to dot like bleeding.

You will not need to go through any operations or procedures, it is as simple as tightly monitoring and controlling blood pressure and blood glucose levels.

This is the most important and effective way of preventing the disease's progression.

Approximately one in seven of you will fall into the third group. Proliferative retinopathy and maculopathy are serious stages of the disease.





Let's look first at proliferative retinopathy.

Circulation problems in the blood vessels of the retina mean some areas don't get enough oxygen.

New fragile vessels form to bring in this missing oxygen. Since these new vessels are so delicate they can haemorrhage easily leading to blood leaking into the retina which causes floaters and decreases the quality of your vision.

Laser will be used to shrink these. Maculopathy and its effects are quite different. It affects the central part of the retina called the macula.

This area is responsible for sharp vision for example when watching TV or reading.

Diabetic maculopathy which you might also hear being called macular oedema is caused by the build-up of fluid in the macula.

This watery fluid leaks through damaged blood vessels and is rich in fat and cholesterol although the eye reabsorbs the water easily the fat and cholesterol leaves behind a residue called exudates.

These are seen in the retinal photograph as yellow blobs around the area of fluid leakage. If the fluid accumulates too close to the centre of the macula then your central vision will be distorted.

If too much of this fluid accumulates in the macula then it can cause permanent loss of central vision.

To prevent this, laser is used by the ophthalmologist. If you can keep your blood pressure and blood glucose levels at the level recommended by your doctor then you are much less likely to develop any of these problems.

In most cases laser treatment is successful in preventing the loss of your vision. It is more effective if changes are caught early and this is why screening is so important.

New research is continuing into alternative drug treatments that can control or limit the effects of the disease we'll let you know when these become available to you.



