

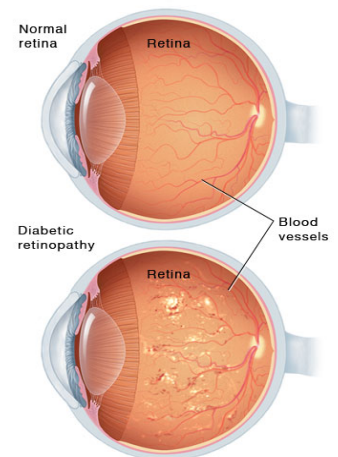
Patient Information

Diabetic Retinopathy



What is diabetic retinopathy?

- Diabetic Retinopathy (DR) occurs when blood vessels in retina are damaged and can happen in anyone who has diabetes.
- The retina lines the back of the eye. It sends a signal to the brain helping you to see.
- Damage to the retina can cause visual impairment that is likely to get worse without treatment.



How does diabetes cause retinopathy?

- In patients with diabetes, consistently high levels of sugar cause changes to small blood vessels in the eye, resulting in eye damage.
- Changes to levels of fat in your blood and high blood pressure can also result in retinopathy.
- DR can affect all patients with diabetes and becomes particularly dangerous. If left untreated, DR can increase the risk of blindness.

Image from MayoClinic.org

There are 3 types of DR

1. Non-proliferative retinopathy

- An early stage of retinopathy with no visual symptoms associated.
- The small blood vessels of the eye swell a little.
- It is likely to be detected during annual retinal screening and should be monitored regularly.

2. Proliferative retinopathy

- Blood vessels in large areas of the retina are damaged and cause the eye to grow new blood vessels.
- These new blood vessels bleed easily, which cause a sudden shower of floaters or cobwebs in your vision. If left untreated, may cause scarring in your retina and long term visual loss.

3. Macular oedema*

- Swelling of the macular is caused by leakage of fluid from the damaged blood vessels in your eye.
- This can cause loss or distortion of central vision.

*More information is provided in a separate leaflet.

Symptoms of DR

- The early stages of DR may occur without symptoms and without pain. Symptoms may only become noticeable once the disease advances.
- Symptoms of retinopathy to look out for include:

Sudden visual changes
Blurred vision
Eye floaters and spots

Treatment options for retinopathy



Strict diabetes and blood pressure control

- To reduce the risk and prevent further development of DR, it is important that your blood sugar, blood pressure and cholesterol levels are well controlled.
- Make sure to attend appointments with diabetic nurse, GP or hospital doctor regularly.



Laser treatment

- Proliferative diabetic retinopathy is treated with laser.
- This treatment uses a laser to produce small areas of heat on the retina. This creates small laser burns scattered across the retina.
- The goal of laser treatment is to cause the abnormal blood vessels to shrink and disappear. It does not improve your vision but aims to prevent severe vision loss.
- Before the procedure, a local anaesthetic will be given to numb your eye as well as an eye drop to dilate the pupils.
- A special contact lens will be placed to hold your eyelids open and allow a laser beam to be focused on your retina.
- This treatment is usually not painful but you may feel sharp pricking sensation.



Surgery

- In DR, bleeding can occur in the retina and gel-like fluid fills the eye. This blood usually clears on its own. If this fails to clear, you may need surgery to remove the blood.
- In advanced DR, scar tissue can form on the retina. This causes the retina to be pulled away from the back of the eye (retinal detachment). Surgery will be required to remove the scar tissue and repair the retina.

Acknowledgement

This information leaflet is adapted from Diabetes UK and Novartis UK.

For more information - [www. Diabetes.org.uk](http://www.Diabetes.org.uk)