

The Royal Australian and New Zealand **College of Ophthalmologists**

DIABETIC RETINOPATHY

ONLINE PATIENT ADVISORY

his leaflet is intended to provide you with general information. It is not a substitute for advice from your ophthalmologist. You are encouraged to discuss the benefits and risks of treatment with your ophthalmologist. This is an abridged version of the RANZCO patient education pamphlet: Diabetic retinopathy and surgical treatment to preserve vision – a guide for patients. The complete pamphlet is available from your ophthalmologist.

The retina is a layer of special light-sensitive tissue at the back of the eye that sends nerve impulses up the optic nerve to the brain. In people with diabetes, tiny blood vessels in the retina may become diseased and damaged. This process is called diabetic retinopathy. It usually affects the retina slowly, over months or years.

The longer a person has diabetes, the greater the risk of diabetic retinopathy. All people with diabetes are at risk, whether or not they are insulin dependent.

Diabetes can cause the blood vessels to swell and leak blood or fluid around the retina. The healing process forms scar tissue. These problems can damage the retina so badly that the retina functions less effectively and vision is impaired.

The area of the retina that provides the sharpest vision is called the macula. Leaking blood or fluid can cause the macular to swell (macular oedema). This causes blurred vision and is a common result of diabetic retinopathy.

Your medical history

Your ophthalmologist needs to know your medical history to plan the best treatment for you. Tell your ophthalmologist about any health problems you have. Some may interfere with treatment, surgery, anaesthesia, recovery and medical treatment following recovery.

A decision to have surgery

As you make the decision whether to have surgery, make sure that you understand the risks, benefits and limitations of surgery. If you do not have surgery, your symptoms and condition may continue to worsen.

Only you can decide if surgery is right for you. If you have any questions, ask your ophthalmologist.

Anaesthesia

Surgery to treat retinopathy is usually performed under local anaesthesia. Occasionally, general anaesthesia may be used.



Retinal blood vessels affected by diabetes can swell, and then bleed and leak. This leakage (macular oedema) and bleeding (haemorrhage) are the major causes of visual loss in people with diabetes.

Surgery to treat retinopathy

Surgery does not cure diabetic retinopathy but can slow or prevent further vision loss. Procedures include:

- Laser treatment (photocoagulation) the ophthalmologist uses a laser beam to seal leaking blood vessels and to shrink abnormal blood vessels.
- Vitrectomy when a lot of blood has leaked into the eye, and vision does not clear or the retina has detached, a vitrectomy may be needed. The vitreous body, a jelly-like substance that fills the inside of the eye, is removed and replaced with a salt solution. This salt solution is absorbed over time and replaced by fluid produced by the eye. The ophthalmologist may also remove retinal scar tissue during the vitrectomy.

Possible risks and complications

Surgery to treat retinopathy is safe and effective, but does have risks of complications. These are more fully outlined in the complete RANZCO patient education pamphlet and should be discussed with your ophthalmologist.