



Patient & Family Guide  
2020

# Retinal Treatments

Aussi disponible en français :  
*Traitements de la rétine* (FF85-1113)



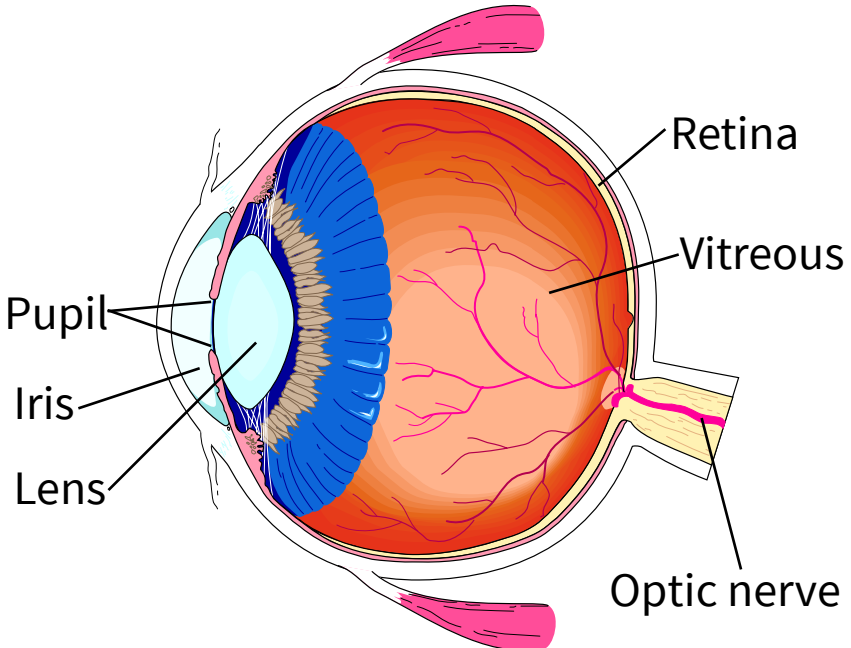
[www.nshealth.ca](http://www.nshealth.ca)

# Retinal Treatments

## What is the retina?

Light is reflected from objects and enters the pupil. It passes through the lens and vitreous onto the retina. The retina is as thin as tissue paper. It changes light into a message which the optic nerve carries to the brain. When the brain receives the message, you have vision.

Change or damage to the retina can cause loss of vision.



## **How can I tell if my retina is damaged?**

Common signs of damage to the retina are:

- › sudden flashes of light
- › floating spots
- › smoke or cobwebs in your vision
- › loss of vision
- › loss of side vision
- › distorted (changed) vision

## **What problems can happen to the retina?**

Your amount of vision loss depends on what part of the retina is damaged. Damage to the centre of the retina causes problems with reading, seeing far, and seeing colour. Damage to the outer area causes changes in both side vision and night vision. Different problems need different treatments.

## **Retinal holes and breaks**

A weak spot on the retina may break due to aging or a blow to the head. Some people have a higher risk of holes or breaks due to heredity (passed down from parents to children). If a break is small, it may not need treatment.

### **Treatment:**

- › cryotherapy
- › laser treatment

(See page 5 for info on treatments.)

## **Diabetic retinopathy**

Diabetes may lead to diabetic retinopathy. This causes changes in the blood vessels that supply blood to the retina. Over time, abnormal blood vessels grow over the inner surface of the retina and may spread into the vitreous. These vessels often bleed into the vitreous, keeping light from reaching the retina. This causes cloudy vision and can lead to retinal detachment (retina pulling away).

### **Treatment:**

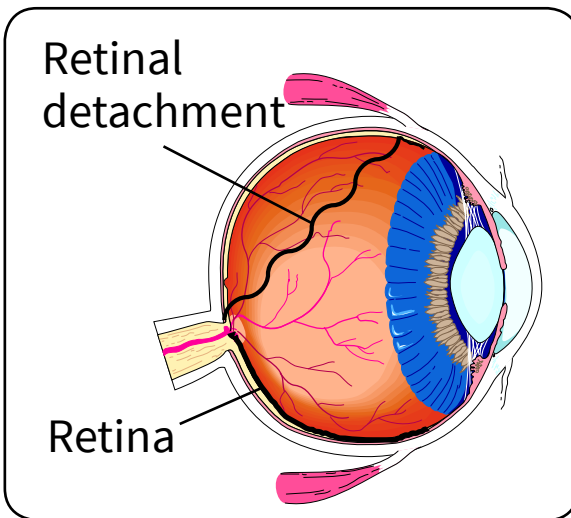
- › laser treatment
- › vitrectomy

## Retinal detachment

When there is a break in the retina, fluid from the vitreous may leak under the top layer and detach it from the eye. This may happen slowly or very quickly. As the retina detaches (pulls away), a shadow may appear, as though a dark curtain has been pulled across the eye.

### Treatment:

- › cryotherapy
- › laser treatment
- › scleral buckle or band
- › injection of bubble



# Treatments

## Laser treatment

Used alone, laser treatment can prevent and stop bleeding, fix holes and breaks, and destroy abnormal blood vessels. It can also be used during or after surgery on the retina to make the attachment of the retina stronger.

Laser treatment uses a highly focused beam of light to create a tiny burn. This “welds” the layers of the retina together, or seals leaking blood vessels.

When laser treatment is done, you will be given drops and/or a needle to freeze your eye. You will sit in front of a laser machine in a dimly lit room. You will be asked to look in many directions so the eye doctor can treat different parts of the retina.

During the treatment, you may see flashes of bright light. These may cause a feeling of warmth or discomfort.

## **Cryotherapy (cold treatment)**

The eye will be frozen using a needle. A freezing probe will be placed on the surface of the eye, over the break in the retina. The cold will freeze the area around the break. As the area heals, scar tissue will form and join the layers of the retina.

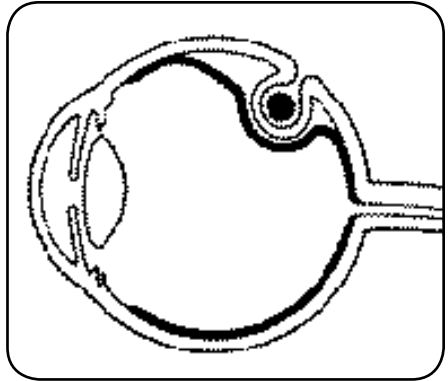
## **Surgery**

### **Vitrectomy**

A small incision (cut) will be made to take out the vitreous fluid from the inner eye. Any scar tissue which is pulling on the retina will also be taken out. The vitreous will be replaced with another fluid.

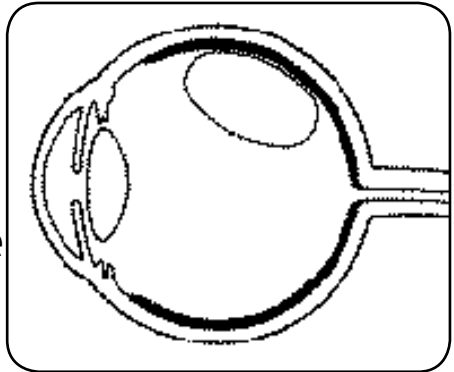
## **Scleral buckle or band**

A scleral buckle (or band) is placed around the eye to close breaks in the retina. You do not see or feel the scleral buckle. Cryotherapy is then done to hold together the retina and the tissue below it. Fluid may be drained from under the retina.



## **Bubble injection**

A bubble of gas, air, or oil may be injected into the vitreous space with a needle. The bubble will push against the break in the retina and keep it in place. You may not be able to see through the bubble.





After surgery, we may ask you to lie or sit a certain way. This will help the bubble close the break and let the fluid under the retina be absorbed. **You may have to lie face down – this is very important.** Your eye doctor will tell you how long to stay in a certain position. **If you have a gas bubble, do not travel by plane due to changes in air pressure until your eye doctor tells you that it is OK.**

This pamphlet is just a guide. If you have questions, please talk to your health care provider. We are here to help you.

# QEII Health Sciences Centre

is made up of 10 buildings located on two sites

- | Halifax Infirmiry Site   |
|--|
| <ol style="list-style-type: none"> <li>1a. Halifax Infirmiry</li> <li>1b. Emergency Dept.</li> <li>2. Abbie J. Lane Memorial Building</li> <li>3. Camp Hill Veterans' Memorial Building</li> </ol>   |
| VG Site  |
| <ol style="list-style-type: none"> <li>4. Nova Scotia Rehabilitation Centre</li> <li>5. Bethune Building</li> <li>6. Mackenzie Building Laboratories</li> <li>7. Centre for Clinical Research</li> <li>8. Dickson Building</li> <li>9. Victoria Building</li> <li>10. Centennial Building</li> </ol> |

- P** Patient Parking
- ▶** Entrance Doors

*Please do not wear scented products when you come to the QEII.*

