

Patient & Family Guide
2023

Retinal Treatments

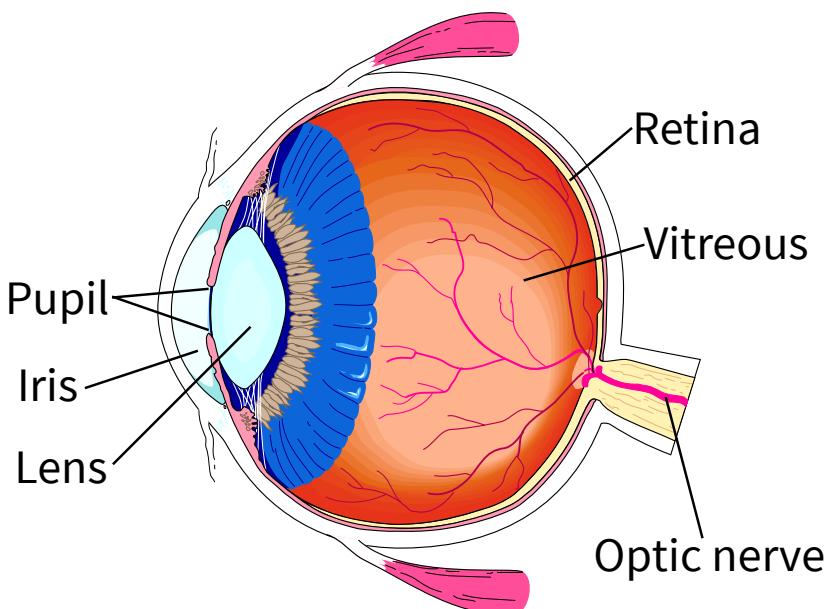
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Retinal Treatments

What is the retina?

- Light is reflected from objects and enters the pupil. It passes through the lens and vitreous (clear jelly-like fluid) onto your retina.
- Your retina changes light into a message. The optic nerve carries the message to your brain. When the brain receives the message, you have vision.
- Your retina is as thin as tissue paper.
- Change or damage to the retina can cause vision loss.



How can I tell if my retina is damaged?

Common signs of retina damage are:

- › Sudden flashes of light in your vision
- › Dots or spots in your vision (floaters)
- › An effect that looks like smoke or a spider web in your vision
- › Loss of vision
- › Loss of side vision
- › Distorted (changed) vision

What kinds of damage can happen?

- The amount and type of vision loss you have depends on what part of your retina is damaged.
- Damage to the centre of the retina causes problems with:
 - › reading.
 - › seeing far away.
 - › seeing colour.

- Damage to the outer area of the retina causes changes in your side vision and your night vision.
- Different problems need different treatments.

Retinal holes and breaks

- A weak spot on your retina may break because of aging, or if you are hit in the head.
- A higher risk of holes or breaks is hereditary (passed down from parents to children) for some people.
- If a break is small, it may not need treatment.

Treatment may include:

- › Cryotherapy
- › Laser treatment

(See page 6 of this pamphlet for information on treatments.)

Diabetic retinopathy

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

Treatment may include:

- › Laser treatment
- › Vitrectomy

(See page 6 of this pamphlet for information on treatments.)

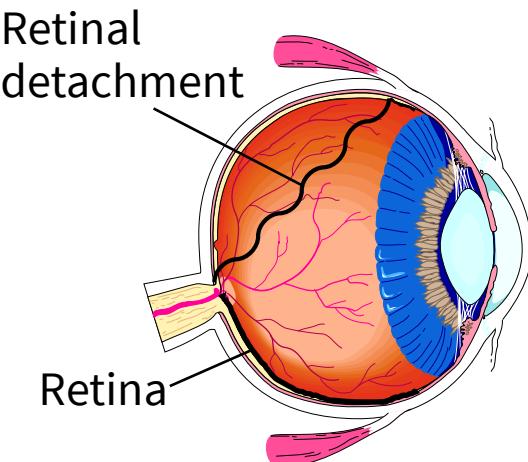
Retinal detachment

- When there is a break in your retina, fluid from the vitreous may leak under the top layer of your retina and detach (pull away) it from the eye. This can happen slowly, or very fast.
- As the retina detaches, you may see a shadow appear in your vision. This may look like there is a dark curtain being pulled across your eye.

Treatment may include:

- › Cryotherapy
- › Laser treatment
- › Bubble injection
- › Scleral buckle or band

(See page 6 of this pamphlet for information on treatments.)



Treatments

Laser treatment

- Laser treatment can:
 - › prevent and stop bleeding.
 - › fix holes and breaks.
 - › destroy abnormal blood vessels.
- Laser treatment is also used during or after retina surgery to attach the retina more strongly.
- Laser treatment uses a very focused beam of light to create a tiny burn. This is used to:
 - › join the layers of the retina together.
 - › seal leaking blood vessels.
- When you are getting laser treatment:
 - › you will be given drops or a needle to numb 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.

- › you may see flashes of bright light during the treatment. These may cause feelings of warmth or discomfort.

Cryotherapy (cold treatment)

- Your eye is frozen using a needle. This makes your eye numb so you will not feel any pain during the treatment.
- A very cold probe is placed on the surface of your eye, over the break in the retina. The cold freezes the area around the break.
- As the area heals, scar tissue forms and joins the layers of the retina together.

**What are your questions?
Please ask. We are here to help you.**

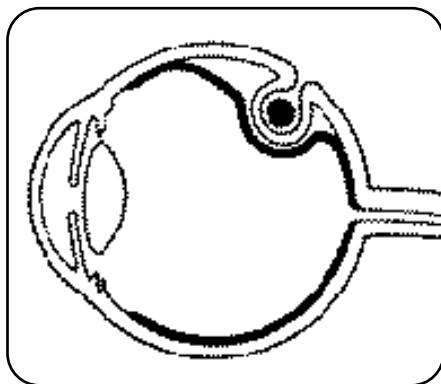
Surgery

Vitrectomy

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

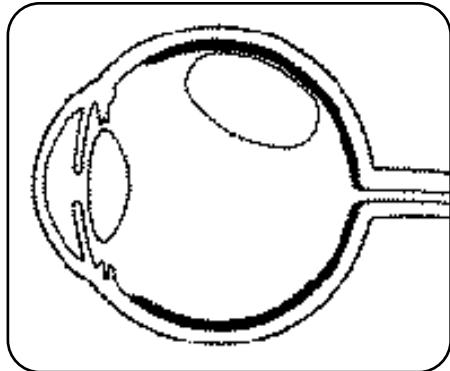
Scleral buckle or band

- A scleral buckle (or band) is placed around the eye to close breaks in the retina.
- You will not see or feel the scleral buckle.
- You will then have cryotherapy to hold together the retina and the tissue below it. You may have fluid drained from under your retina.



Bubble injection

- A needle will be used to inject a bubble of gas, air, or oil into the vitreous space.
- The bubble pushes on the break in the retina and keeps the break in place. You may not be able to see through the bubble.
- After surgery, we may ask you to lie or sit in a certain position. This helps the bubble close the break and lets the fluid under the retina be absorbed (taken in). **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 or air bubble:

- **Do not** travel by plane until your eye doctor tells you it is OK. This is because of the changes in air pressure when flying.
- If you have an oil bubble, it is OK to fly.

Notes:

This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

Find all patient education resources here:
www.nshealth.ca/patient-education-resources

Connect with a registered nurse in Nova Scotia any time:
Call 811 or visit: <https://811.novascotia.ca>

Prepared by: Eye Care Centre

Illustration by: LifeART Super Anatomy 1 Images, Copyright © 1994,
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To be reviewed July 2026 or sooner, if needed.

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