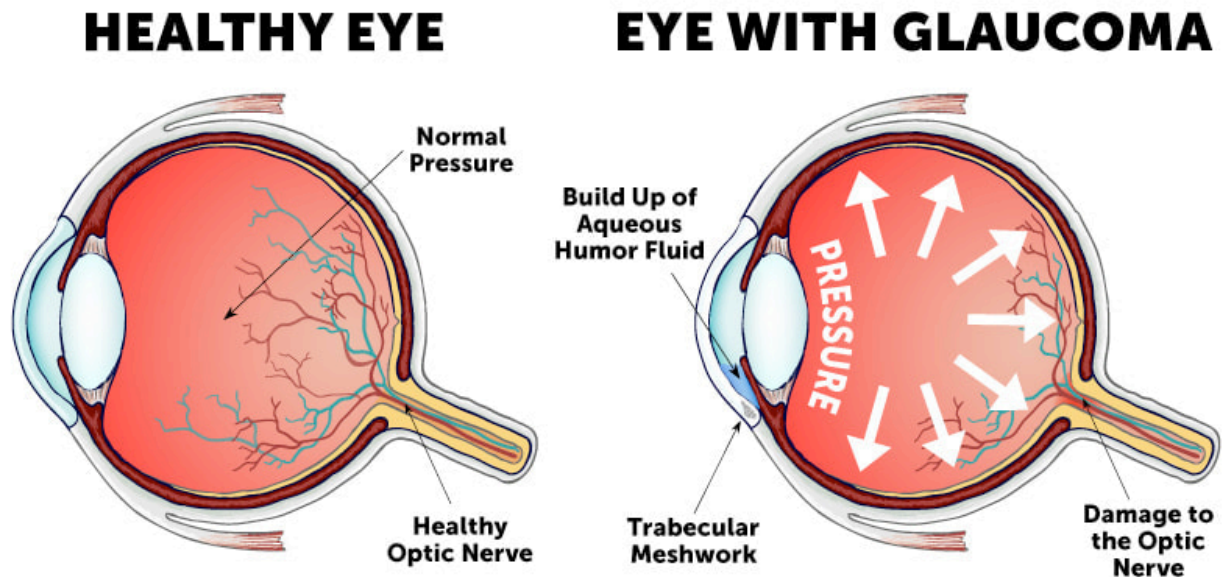


# Understanding Open-Angle Glaucoma

## What is Open-Angle Glaucoma?

Open-angle glaucoma is progressive optic nerve (vision nerve) damage, often caused by increased pressure within the eyeball.

Imagine your eye is like a sink with the tap running. The water filling the sink represents the fluid in your eye (aqueous humour), and the drain is the part of your eye that lets this fluid out. In open-angle glaucoma, it's like the drain is clogged. The water (fluid) builds up, creating high pressure (IOP - intraocular pressure) that can damage the pipes (optic nerve). If not managed, this condition might lead to **irreversible vision loss**. There are often **NO** early warning signs, and patients feel normal, not noticing vision changes.



## Goal of Therapy

The main goal of therapy for open-angle glaucoma is to **decrease eye pressure and preserve vision**. **Lowering** eye pressure helps prevent damage to the optic nerve and progressive loss of sight.

## Available Treatments

1. **Eye Drops:** Medication to reduce eye pressure.
2. **Laser Treatments:** Including Selective Laser Trabeculoplasty (SLT), which is less invasive than surgery.
3. **Incisional Surgery:** More invasive, used when other treatments haven't worked.

## What is Selective Laser Trabeculoplasty (SLT)?

**Selective Laser Trabeculoplasty (SLT)** uses a special targeted laser that is non-invasive to open the drainage system of the eye (like unclogging the sink drain), which helps lower the eye pressure and preserve vision. This treatment specifically targets the trabecular meshwork, a critical component of the eye's natural internal drainage system, to enhance fluid outflow. The success of this laser surgery varies among patients, depending mainly on the type of glaucoma present and the unique characteristics of their drainage system. Unfortunately, your doctor can't predict the exact effectiveness of the laser treatment.

## What happens during the procedure? Does it hurt?

The procedure may be performed in one or two trips to the West Coast Glaucoma Centre. The procedure is quick and takes 5-10 minutes. Typically, the treatment is not painful (you will receive numbing drops), though you might feel a bit of pressure when it's happening. The steps are as follows:

1. **Anti-hypertensive Drops:** applied to prevent a pressure spike after the procedure.
2. **Numbing Drops:** Applied to your eye to ensure you're comfortable during the procedure.

4. **Contact lens:** During the procedure, a special contact lens is placed on your eye to help focus the laser and protect the rest of your eye.
3. **Positioning:** You will sit in a chair in front of the machine, leaning forward slightly to rest your chin and forehead against a support, keeping your head steady.
4. **The Laser:** You'll notice a red light, which is used to aim the laser at the eye's drainage area, improving fluid outflow. The laser providing the treatment is not visible.

## After the procedure

Most patients can comfortably return to normal activities the day after the procedure and often drive home after the treatment. We will see you **1 week** after the procedure to ensure there is no inflammation and then at the **6-week** mark to see how effective the treatment has been (that is how long it may take to see the full effect). You will also be prescribed a steroidal anti-inflammatory drop after the laser (usually taken 4x/day for 3 days but the dosage may vary.)

**In most cases, you will be asked to continue your other glaucoma medications after the laser therapy.** It's common for some to experience soreness in the eye the next day, which could last for 3-4 days. To alleviate discomfort, take Tylenol or Advil and use a cold compress on the eye to enhance your comfort.

## Is it safe? What are the side effects?

SLT is safe in adults, and the complication rate is extremely low. Possible side effects to be aware of:

- **Mild Side Effects:** soreness and redness. These are typically short-term.
- **Blurry vision:** It's normal to experience blurring right after the treatment, which should clear up within 10-15 minutes. This is usually due to the gel used on the lens during the procedure.
- **Light Sensitivity:** Feeling sensitive to light for 24-48 hours post-treatment is common.
- **Elevated Eye Pressure:** Eye pressure may rarely rise after the procedure. This is often managed with extra eye drops or oral medications. In rare instances, a persistent increase in eye pressure might necessitate more invasive surgery.

- **Possible Need for Additional Treatment:** If your eye pressure is lowered but not enough to be under control, you might need another laser session.

It's important to note that all these outcomes are uncommon except for the mild and transient side effects mentioned first. We will provide the necessary treatments if any of these less likely complications occur.

## How Long Does the Treatment Last?

It will take several weeks to determine how much of your eye pressure was lowered with this treatment. The success rate is approximately 85%, and has a 5% chance per year of wearing out. Just like for all medical procedures, the postoperative results vary among individuals. There is the potential for SLT not to have any effect on eye pressure. Glaucoma medication can be used if the effect wears off over time. It is important to be continually monitored for glaucoma, so follow-up appointments with your doctor are critical. If needed, SLT can be safely repeated in the future, depending on the results of the previous application.

## Why SLT Might Be Suggested

1. If eye drops aren't effective or if you have trouble using them.
2. SLT is safer and may soon be preferred as the first treatment for new patients.
3. For those who can't tolerate medication side effects.

## Any Further Questions?

If you'd like to review the informational video about the SLT procedure you watched at the office, you can scan the QR code below with your camera anytime. For added convenience, a video copy will also be emailed to you.

Should you have any concerns or questions about the SLT procedure or your specific treatment plan, please bring them up with your doctor. We are here to ensure you feel confident and informed every step of the way. Your eye health and comfort are our top priorities.

