

Preperimetric Glaucoma: Understanding Your Condition

Introduction

Preperimetric Glaucoma is an early stage of glaucoma, a group of eye conditions that damage the optic nerve, vital for good vision. This damage is usually caused by abnormally high pressure in your eye. In Preperimetric Glaucoma, there is evidence of glaucomatous optic neuropathy but no detectable visual field loss on standard automated perimetry tests.

What is Preperimetric Glaucoma?

- Definition: It refers to the stage where the optic nerve shows signs of damage, but this has not yet translated into detectable vision loss in standard field tests.
- Significance: Early detection is crucial as it allows for monitoring and treatment before significant vision loss occurs.

Causes and Risk Factors

- Intraocular Pressure (IOP): Elevated IOP is a significant risk factor, though glaucoma can occur without it.
- Age: The risk increases with age.
- Family History: Genetics can play a role.
- Other Factors: High myopia, diabetes, and cardiovascular diseases.

Symptoms

- Typically, there are no symptoms in the early stages.
- Regular eye exams are critical for early detection.

Diagnosis

- Ophthalmic Examination: Includes checking the IOP, inspecting the drainage angle, and assessing the optic nerve.
- Optical Coherence Tomography (OCT): Provides detailed images of the optic nerve and retinal nerve fibre layer.
- Visual Field Testing: Although standard tests may be normal, they are essential for baseline and monitoring.

Treatment

- Goal: To lower IOP to a level that is unlikely to cause further optic nerve damage.

- Medications: Eye Drops use to be first line of treatment but increasingly Selective Laser Trabeculoplasty is being offered as a more convenient and safe treatment with fewer side effects. Most commonly a Prostaglandin will be first choice, but there are several other drops that can be used.

- Laser Therapy: Selective Laser Trabeculoplasty helps improve drainage of intraocular fluid. May avoid the need for eye drops or be in addition to eye drops. It uses very low power laser treatment to open the drainage meshwork in the angle of the eye. It is a painless treatment that takes 10 -15 minutes to apply per eye. It takes a few months to lower the intra-ocular pressure. The duration of the effect of SLT is also variable. In many cases, the effect can last for several years, but it may diminish over time, requiring repeat treatments. Typically 70-80% of patients respond well.

Eye drops can be administered along side Selective Laser Trabeculoplasty if the intra-ocular pressure lowering effective is insufficient.

- Surgery: In cases where medication and laser therapy are not sufficient. Istents are a less invasive procedure than surgical trabeculectomy.

Monitoring and Prognosis

- Regular Follow-ups: Essential for monitoring IOP, optic nerve health, and any changes in vision.

- Lifestyle Adjustments: Regular exercise and a healthy diet can help.

Conclusion

Preperimetric Glaucoma is a silent condition that requires early detection and ongoing management to prevent progression to more advanced stages of glaucoma, which can lead to vision loss. Regular eye examinations are crucial.

Disclaimer: This handout provides general information and is not a substitute for professional medical advice. Always consult your healthcare provider for personalized care.