

GLAUCOMA

Glaucoma is a group of eye diseases which result in damage to the [optic nerve](#) and [vision loss](#). The most common type is open-angle glaucoma with less common types including closed-angle glaucoma and [normal-tension glaucoma](#). Open-angle glaucoma develops slowly over time and there is no pain. [Peripheral vision](#) may begin to decrease followed by central vision much later resulting in total [blindness if not treated](#). Closed-angle glaucoma can present gradually or suddenly.

Symptoms

- severe eye pain,
- blurred vision
- redness of the eye, and
- The affected person **MAY HAVE** nausea.

Vision loss from glaucoma, once it has occurred, is permanent. Researchers worldwide however are currently investigating stem cell therapy treatment as a cure.

Risk factors for glaucoma include:

- increased [pressure in the eye](#),
- a family history of the condition,
- [migraines](#),
- [high blood pressure](#)
- [obesity](#).

For eye pressures a value of greater than 21 mmHg is often used with higher pressures leading to a greater risk. However, some may have high eye pressure for years and never develop damage. Conversely, optic nerve damage may occur with normal pressure, known as normal-tension glaucoma. The mechanism of open-angle glaucoma is believed to be slow exit of [aqueous humor](#) through the [trabecular meshwork](#) while in closed-angle glaucoma the [iris](#) blocks the trabecular meshwork.

Diagnosis is by a dilated [eye examination](#). Often the optic nerve shows an abnormal amount of [cupping](#).

Treatment:

If treated early it is possible to slow or stop the progression of disease with medication, [laser](#) treatment, or surgery. The goal of these treatments is to decrease eye pressure. A number of different classes of [glaucoma medication](#) are available. Laser treatments may be effective in both open-angle and closed-angle glaucoma. A number of types of [glaucoma surgeries](#) may be used in people who do not respond sufficiently to other measures.