Laser Peripheral Iridotomy

Laser peripheral iridotomy delivers a concentrated beam of energy to make a small hole in the iris (the coloured part of the eye). Aqueous humour can then flow into the anterior chamber.

How does it work?
In acute angle closure the fluid in the eye (aqueous humour) is unable to pass into the anterior chamber and drain from the eye. The iris may be pushed forward on to the drainage system and restrict the outflow of aqueous so that the pressure within the eye rises.

Laser peripheral iridotomy is the treatment of choice in this situation and in those eyes at risk of acute angle closure to prevent a future attack and rise in pressure.

Who is it suitable for?
Laser peripheral iridotomy is a treatment used for patients who have or are at risk of developing acute angle closure or who have chronic angle closure glaucoma.

What are the benefits?
Laser peripheral iridotomy will reduce the risk of future acute attacks of glaucoma and will reduce intraocular pressure in an acute attack. It will also open the anterior chamber angle which may reduce the risk of progression to chronic angle closure glaucoma.
Before the procedure
Pilocarpine is used to constrict the pupil prior to the laser. It may sometimes cause a temporary headache. Topical anaesthetic drops are also administered prior to the laser.

During the procedure
After anaesthetic drops are instilled in your eyes, a special lens will be placed on the eye. Some people feel a mild, sharp sensation during the laser treatment. There is usually no pain after the laser is complete.

After the procedure
After the laser you will have drops to reduce inflammation in the eye. The pressure in your eye will be checked after the laser procedure.

What are the risks?
Intraocular pressure can rise after an iridotomy, however pressure lowering drops are often given to prevent this.
Reports suggest that an iridotomy may accelerate the progression of a cataract or cause microscopic bleeding from the iris. There have been reports of glare and monocular blurring/diplopia following iridotomy but this is rare.

Are there any alternatives?
Argon laser peripheral Iridoplasty is another laser used in the treatment or prevention of angle closure. The Argon laser is delivered in a circumferential manner to the peripheral iris near the anterior chamber angle to widen the drainage angle. This laser is usually painless and can be done in an acute angle closure situation if a peripheral iridotomy is not possible.
Cataract surgery will also open a narrow anterior chamber angle and prevent future acute attacks of glaucoma.