

# OCULAR HYPERTENSION

## What is ocular hypertension?

Ocular hypertension is when the intraocular pressure is higher than normal in the absence of optic nerve damage or visual field loss. Normal intraocular pressure (IOP) is between 10mmHg and 21mmHg. Raised IOP is one of the risk factors of Glaucoma, so those with ocular hypertension are considered to be at a higher risk of developing Glaucoma, which is why it is most important for people with ocular hypertension to be monitored carefully in order that should glaucoma develop, is detected at the earliest possible stage when treatment is most effective.

If, at a routine eye examination, we find that your intraocular pressures are outside of the normal range or that there are any other suspicions of glaucoma, we will advise further investigation with more complex and specific tests for glaucoma (known as a referral refinement visit). These tests are designed to more accurately establish whether or not you should be referred to see a specialist. The extra information that we can give a consultant from this visit can assist in speedier diagnosis of any possible problems and hence quicker appropriate treatment, if indicated.

## OCT examination

New specialised techniques allow us to investigate more accurately whether you are developing glaucoma. We are able to check the eye structures in 3 dimensions (a bit like an MRI scan) and establish important information about the health of the optic nerve, the anatomy of the 'angle' of the eye and the corneal thickness, all of which assists in accurately diagnosing glaucoma. OCT will be recommended to all people who appear to be ocular hypertensives.

## The importance of corneal thickness

Recent discoveries about the cornea, the clear part of the eye's protective covering, are showing that corneal thickness is an important factor in accurately diagnosing eye pressure. When we measure the IOP we don't always get a truly accurate reading. The IOP reading depends on the thickness of the cornea. Thicker corneas cause falsely higher eye pressure readings and thinner corneas cause falsely lower eye pressure readings.

Your corneal thickness therefore affects your risk for glaucoma, and knowing what your corneal thickness is can make your diagnosis more accurate. With an ultrasonic device called a Pachymeter we can measure your corneal thickness and hence establish your true IOP.

## What is Glaucoma?

Glaucoma is the name for a group of eye conditions in which the optic nerve is damaged at the point where it leaves the eye. This causes a loss of peripheral vision which is why it can go undetected until the later stages. If it remains undetected for a long period of time then it may result in "tunnel vision" and blindness.

In the UK some form of glaucoma affects about 2 in 100 people over the age of 40. If detected early enough, glaucoma can usually be treated. In most cases, eye drops to reduce the pressure will be prescribed, although in some cases a minor operation is needed. Treatment is unable to restore vision that has been lost but aims to preserve the remaining sight.

Regular eye examinations where the ocular health, eye pressure and field of vision are checked are essential. Raised IOP is NOT the same as high blood pressure. If you are worried about glaucoma, or would like any more information please contact the practice and we will be happy to talk to you