



## What is OCT (Optical Coherence Tomography)?

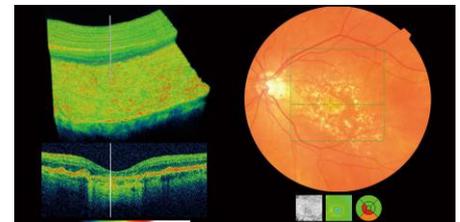
OCT is a new and highly advanced screening system that can give **earlier** and **more accurate** diagnosis of potentially serious eye conditions such as glaucoma, age-related macular degeneration, macular holes, vitreous detachments etc.

Similar to ultrasound, OCT uses light rather than sound waves to show in 3D the different layers that make up the back of your eye. We also capture a digital photograph of the surface of your eye to cross-reference any areas of concern.

The software can compare your eyes to a database of normal eyes of your age and ethnicity and flags up if there is a problem or if you are at high risk of developing an eye problem. The software can also automatically detect even the most subtle changes to the retina over time giving an ongoing record of the health of your eyes.

## What does OCT cost?

We make a charge of £39 for the OCT scan. This includes at least 2 scans for each eye and the analysis and discussion of the results with your Optometrist.



## Do I need an OCT scan?

If the cost is not an issue, we would recommend that everyone over the age of 40 has a scan as this new technology can safeguard your eye health in ways not previously possible.

OCT is strongly recommended if you are over 40 years old with a family history of glaucoma as it can detect glaucoma at an earlier stage than other methods. It also gives an indication of the likelihood of developing glaucoma in the future.

OCT is recommended if you have a family history of macular disease as the scan gives early detection and identification of the condition which can improve outcomes.

Your Optometrist will also recommend a scan if you have symptoms or signs that require further investigation.

## Will I need my pupils dilated?

If your pupils are particularly small, or if you have issues such as cataract which reduce the clarity of the view, pupil dilation may be necessary. Your Optometrist will advise you at the time of your appointment if this is necessary.

## How long does OCT take?

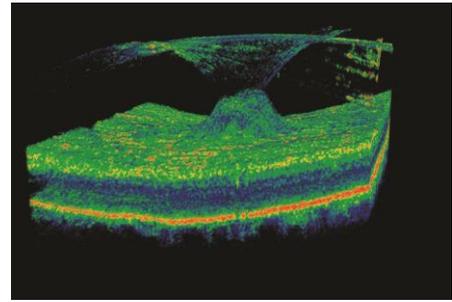
The scan is simple and quick and can usually be accommodated within or normal 40 minute eye examination appointment.

## Does it hurt?

The scan is non-invasive and painless.

## What can the scan check for?

Common conditions identified through regular OCT screening include:



### 1. Age-related macular degeneration

Macular degeneration causes the gradual breakdown of the macular (the central portion of the eye). OCT cannot only identify this condition and its type (there are two types, wet and dry) but also monitor its progress, for example if you are undergoing treatment for such a condition. Unfortunately the risk of developing macular degeneration increases with age, and it is the most common causes of vision loss in individuals over the age of fifty

### 2. Glaucoma

Glaucoma damages the optic nerve at the point where it leaves the eye. Recent statistics suggest that some form of glaucoma affects around two in every 100 people over the age of 40. The danger with chronic glaucoma is that there is no pain and your eyesight will seem to be unchanged, but your vision is being damaged. An OCT examination will confirm if you are at risk, or indeed what stage of glaucoma you may have.

### 3. Macular holes

A macular hole is a small hole in the macular – the part of the retina which is responsible for our sharp, detailed, central vision. This is the vision we use when we are looking directly at things, when reading, sewing or using a computer. There are many causes of macular holes. One is caused by vitreous detachment, when the vitreous pulls away from the back of the eye and sometimes it does not 'let go' and eventually tears the retina, leaving a hole. Extreme exposure to sunlight (for example staring at the sun during an eclipse) can also cause a macular hole to develop.

### 4. Vitreous detachments

Vitreous-macular traction can clearly be diagnosed through OCT providing invaluable information about the current relationship between the vitreous and the retinal surface of the eye. As people get older the vitreous jelly that takes up the space in our eyeball can change. It can become less firm and can move away from the back of the eye towards the centre, in some cases parts do not detach and cause 'pulling' of the retinal surface. The danger of a vitreous detachment is that there is no pain and your eyesight will seem unchanged but the back of your eye may be being damaged.

### 5. Diabetes

Diabetic retinopathy is a major cause of visual impairment among adults. Here in the UK, more than two million people have been identified as having diabetes. OCT examination enables early detection, which greatly improves the success rate of treatment.

