# Newsletter Number 20

Northumberland NHS Care Trust Innovation in Practice Awards



Outstanding
Optometrist
of the Year

### B INDEPENDENT Prescribing

## **Extending the Role of Community Based Eyecare**

# OCT : Ocular Coherence Tomographer

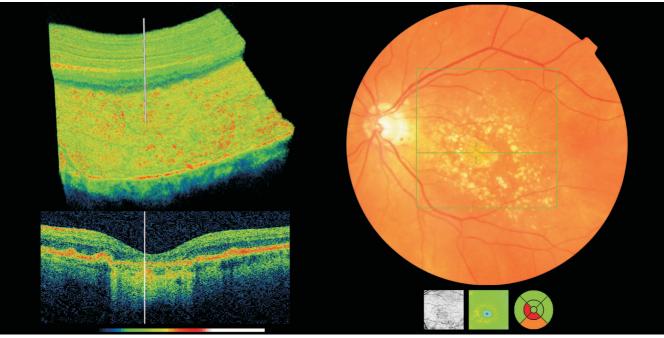
Finally we have obtained this absolute state of the art piece of technology. Similar to Ultrasound, the OCT uses light rather than sound waves to see inside the retinal layers of the eye. This dramatically overtakes retinal photography, a technology that is now quite old and which we have offered for over 15 years. Retinal photography only shows the surface of the retina. OCT, a non-invasive, painless and quick scan lets us see into the retina, never previously possible.

Very subtle changes, beneath the retinal surface, due to diabetes, macula degeneration, macular holes, detachments and glaucoma can be detected at the earliest stages; ensuring most successful treatment.



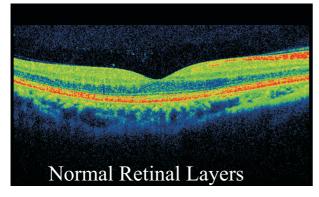
Page 2. Some Ocular Coherence Tomographer images

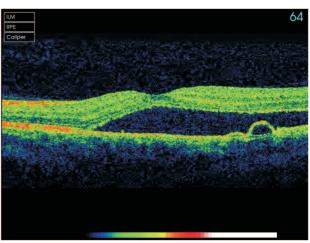
#### **OCT Images**

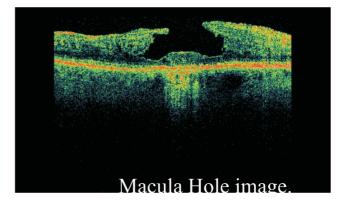


While retinal photos (above right) show the surface of the retina, they cannot show subtle changes below the surface.

An OCT (above left) lets us visualise deep layers within the retina. The example shown (directly above) is dry age related macula degeneration. Right : a close up of fluid within the retina due to 'Wet' macula degeneration and requiring prompt referral and treatment with Lucentis injections. Compare the OCT image on the right with the normal retinal layers below.







Unfortunately this technology is expensive; the OCT cost £50,000; since the NHS does not fund these cutting edge techniques a charge is necessary. However the technology is too important not to offer. We could have decided simply not to offer it but your health care should never depend on someone else's idea of costs. Our role is to ensure you have all available choices and opportunities; our role is not to offer only second best service based on costs.