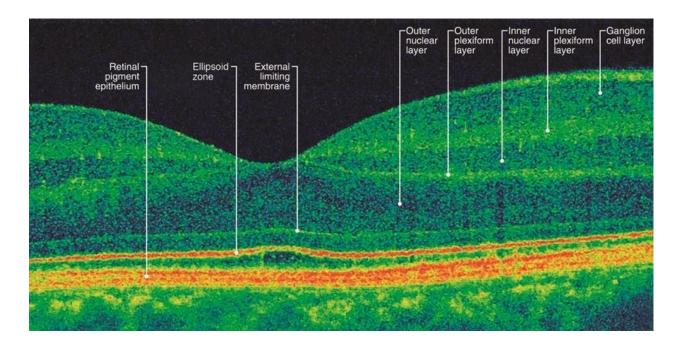
What Is Optical Coherence Tomography?



Written By: David Turbert

Reviewed By: Ninel Z Gregori MD

Apr. 09, 2020

Optical coherence tomography (OCT) is a non-invasive imaging test. OCT uses light waves to take cross-section pictures of your retina.

With OCT, your <u>ophthalmologist</u> can see each of the retina's distinctive layers. This allows your ophthalmologist to map and measure their thickness. These measurements help with diagnosis. They also provide treatment guidance for <u>glaucoma</u> and diseases of the <u>retina</u>. These retinal diseases include <u>age-related macular degeneration (AMD)</u> and <u>diabetic eye disease</u>.

What happens during OCT?

To prepare you for an OCT exam, your ophthalmologist may or may not put <u>dilating eye</u> <u>drops</u> in your eyes. These drops widen your <u>pupil</u> and make it easier to examine the retina.

You will sit in front of the OCT machine and rest your head on a support to keep it motionless. The equipment will then scan your eye without touching it. Scanning takes about 5 – 10 minutes. If your eyes were dilated, they may be sensitive to light for several hours after the exam.

OCT is useful in diagnosing many eye conditions, including:

- macular hole
- macular pucker
- macular edema
- age-related macular degeneration
- glaucoma
- central serous retinopathy
- diabetic retinopathy
- vitreous traction

OCT is often used to evaluate disorders of the <u>optic nerve</u> as well. The OCT exam helps your ophthalmologist see changes to the fibers of the optic nerve. For example, it can detect changes caused by <u>glaucoma</u>.

OCT relies on light waves. It cannot be used with conditions that interfere with light passing through the eye. These conditions include dense <u>cataracts</u> or significant bleeding in the <u>vitreous</u>.

Sources:

https://www.aao.org/eye-health/treatments/what-is-optical-coherence-tomography https://www.aao.org/eye-health/treatments/what-does-optical-coherence-tomography-diagnose