

## **Optical Coherence Tomography (OCT) in MS**

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There's a lot of research being done on, uh, vision in multiple sclerosis. One of the very new, exciting things that we have now that we're using in clinical practices is optical coherence tomography or OCT. And what OCT is basically a ultrasound but instead of using sound waves like you would use for, you know, a pregnant woman. OCT actually uses light waves at a specific wave length. We don't have to put into a fancy schmancy machine like an MRI and spend an hour and spend a lot of money. This is actually a very quick test. It's non-invasive. Just a bunch of lights. And that actually allows us to look at the retina in the optic nerve and that's very often, affected in people with multiple sclerosis.

We can really look at the fine details of the optic nerve and, and retina. And what we found is that these patients with multiple sclerosis, who despite having 20/20 vision, we can actually find abnormalities. This OCT has really helped us understand that there are subtle changes in the optic nerve or retina that we couldn't see with our naked eye that we're now seeing that explains why this person is complaining and having so much difficulties.

And we can measure the thickness of the optic nerve, and many clinical trials are using OCT to look at the optic nerve in terms of getting a sense of how well the person is doing in terms of the disease. For those patients who have had MS who were involved in clinical trials, they're very often getting eye exams as part of the clinical trial, uh, even though the, the drug is being used for something else. Because the optic nerve is part of the brain, you can look at the optic nerve to see if that medicine is affecting, uh, or is having a beneficial effect on the optic nerve.