

Eye scan could help track progress of multiple sclerosis

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Study found that faster thinning of retina was tied to more lesions.

(HealthDay)—In-office eye scans that assess the thinning of the retina may also help doctors determine how fast multiple sclerosis (MS) is progressing in patients with the nervous system disease, a new study suggests.

The study included 164 <u>MS patients</u> who underwent eye scans every six months for an average of 21 months. The participants also had MRI brain scans at the start of the study and yearly.

Patients with MS relapses had 42 percent faster retinal thinning than those with no relapses, the study found. Patients with inflammatory lesions called gadolinium-enhancing lesions had 54 percent faster retinal thinning, and those with new T2 lesions had 36 percent faster thinning,



compared to patients who did not have evidence of such lesions on their MRI brain scans, the investigators found.

In addition, patients whose disability levels worsened during the study period had 37 percent more retinal thinning than those who had no changes in their disability levels.

And compared with patients who had the disease for more than five years, those who had MS for less than five years had 43 percent faster retinal thinning, the study authors noted.

The findings suggest that retinal thinning may occur faster in patients with earlier and more active MS.

The new report appears in the Jan. 1 online edition of the journal *Neurology*. It updates earlier results from this study, published in the <u>Archives of Neurology</u> in October.

"As more therapies are developed to slow the progression of MS, testing retinal thinning in the eyes may be helpful in evaluating how effective those therapies are," study author Dr. Peter Calabresi, of the Johns Hopkins University School of Medicine, said in a journal news release.

Other experts not connected to the study agreed.

"This study reports an important link between the inflammatory and neurodegenerative aspects of MS that should lead to a better understanding of the underlying mechanisms of tissue damage," said Dr. Fred Lublin, director of the Corinne Goldsmith Dickinson Center for <u>Multiple Sclerosis</u> at the Icahn School of Medicine at Mount Sinai, in New York City. He added that, "The techniques described may add to our ability to better perform studies of neuroprotective agents in MS."



And Dr. Floyd Warren, chief of neuro-ophthalmology at Lenox Hill Hospital, in New York City, called the study "very intriguing."

He stressed, however, that the study was preliminary and "looked primarily at relapsing remitting MS; the progressive forms and clinically isolated syndrome patients were much fewer in number."

Warren agreed with the other experts that these retinal scans might be used to track the effectiveness of new MS drugs, especially since such tests are "totally benign" and have "relatively low cost."

"Further studies with larger numbers of progressive <u>MS patients</u> will need to be done to see if it proves as (potentially) a reliable marker in these patients," he said.

More information: The U.S. National Institute of Neurological Disorders and Stroke has more about <u>multiple sclerosis</u>.

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