Thresholds found for unilateral optic nerve lesions in MS

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(HealthDay)—A new anatomic threshold may be useful for identifying

unilateral optic nerve lesions in patients with multiple sclerosis, according to a study published in the May issue of the *Annals of Neurology*.

Rachel C. Nolan-Kenney, from the New York University School of Medicine in New York City, and colleagues measured optical coherence tomography for 1,530 patients with multiple sclerosis and healthy controls seen at 11 international sites as part of the International Multiple Sclerosis Visual System Consortium. For this study, presence of an optic nerve lesion was defined as history of acute unilateral optic neuritis.

The researchers found that for identifying unilateral optic neuritis, receiver operating characteristic curve analysis showed an optimal peripapillary retinal nerve fiber layer intereye difference threshold of 5 µm and ganglion cell + inner plexiform layer threshold of 4 µm (477 patients). An association was noted between greater intereye differences in acuities and greater intereye retinal layer thickness differences.

"These thresholds may be useful in establishing the presence of asymptomatic and symptomatic optic nerve lesions in multiple sclerosis and could be useful in a new version of the diagnostic criteria," the authors write.

More information: Abstract/Full Text (subscription or payment may be required)