Training can improve visual field losses from glaucoma

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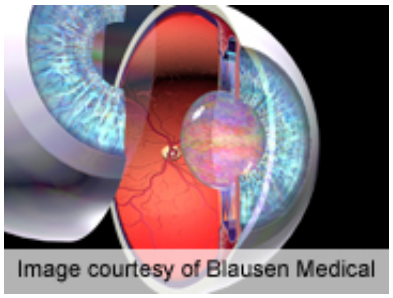

(HealthDay)—Visual field loss from glaucoma is in part reversible by behavioral, computer-based, online controlled vision training, according to a study published in the April issue of *JAMA Ophthalmology*.

Bernhard A. Sabel, Ph.D., and Julia Gudlin, Ph.D., from the University of Magdeburg in Germany, randomized patients with glaucoma (mean age, 61.7 years), but stable visual fields and well-controlled intraocular pressure, to either a computer-based vision restoration training for glaucoma (15 subjects) or visual discrimination placebo training in the intact visual field (15 subjects). Four patients withdrew.

The researchers found that vision restoration training was tied to significant detection accuracy gains in high-resolution perimetry (P = 0.007), which were not found with white-on-white or blue-on-yellow perimetry. After this training, the pre-post differences were greater in all perimetry tests (P = 0.02 for high-resolution perimetry; P = 0.04 for white on white; and P = 0.04 for blue on yellow), compared with placebo. These results were independent of eye movements. Faster reaction time (P = 0.009) was also achieved with vision restoration training, but not placebo. While vision-related quality of life was unchanged, the health-related quality-of-life mental health domain increased in both groups.

"Visual field defects caused by glaucoma can be improved by repetitively activating residual vision through training the visual field borders and areas of residual vision, thereby increasing their detection sensitivity," the authors write.

More information: Abstract
Full Text