

# Glaucoma may result from white matter degeneration

May 2 2016

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(HealthDay)—Glaucoma may be associated with lower fractional

anisotropy in the optic radiations, forceps major, and corpus callosum, possibly as a result of white matter degeneration, according to a study published online April 25 in *Ophthalmic & Physiological Optics*.

Christine C. Boucard, Ph.D., from Jikei University in Japan, and colleagues performed diffusion tensor imaging in 30 participants with normal-pressure glaucoma and 21 age-matched healthy controls. Fractional anisotropy and mean diffusivity of the [white matter](#) of the brain were compared between the groups using voxel-wise tract-based spatial statistics.

The researchers found that fractional anisotropy was significantly lower in glaucoma patients in a cluster in the right occipital lobe (P corpus callosum and parietal lobe (P

"In this specific population, [glaucoma](#) is associated with lower fractional anisotropy in the optic radiations, forceps major, and corpus callosum. We interpret these reductions as evidence for white matter degeneration in these loci," write the authors.

**More information:** [Abstract](#)  
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Citation: Glaucoma may result from white matter degeneration (2016, May 2) retrieved 6 May 2024 from <https://medicalxpress.com/news/2016-05-glaucoma-result-white-degeneration.html>

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