

Pilocarpine expands schlemm canal in healthy eyes, glaucoma

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(HealthDay)—Pilocarpine expands the Schlemm canal in eyes with and

without glaucoma, according to a study published online June 23 in *JAMA Ophthalmology*.

Alon Skaat, M.D., from the New York Eye and Ear Infirmary of Mount Sinai in New York City, and colleagues examined the effect of pilocarpine on the structure of the Schlemm canal in vivo in a case-control study. Nine healthy individuals and 10 patients with open-angle glaucoma were prospectively enrolled after a complete ophthalmologic examination. Enhanced depth imaging optical coherence tomographic scans of the Schlemm canal were performed before and after topical pilocarpine administration (1 percent in healthy eyes and 2 percent in eyes with glaucoma).

The researchers found that the mean intraocular pressure decreased from 14.3 to 13.7 mm Hg in healthy eyes and from 17.5 to 16.6 mm Hg in eyes with glaucoma, following pilocarpine administration ($P = 0.004$ and 0.01 , respectively). In healthy eyes and eyes with glaucoma, the mean cross-sectional area of the Schlemm canal increased by 21 and 24 percent, respectively (both P

"These data suggest that pilocarpine expands the Schlemm canal in eyes with and without [glaucoma](#)," the authors write. "No differences in the effect were identified between the two groups."

Several authors disclosed financial ties to the medical device industry.

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