Medical Xpress

ARVO: Latanoprost halts myopia progression in animal study

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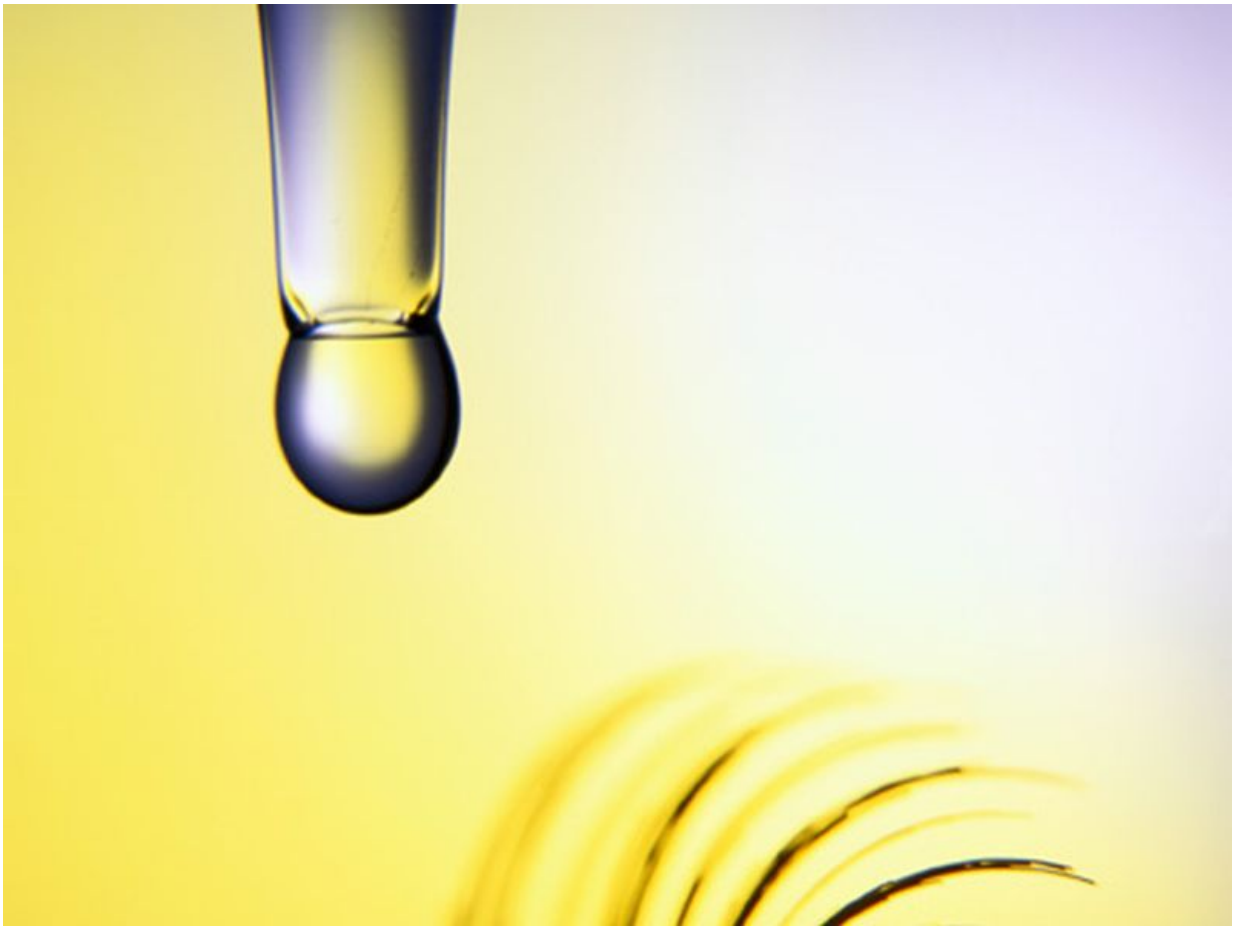

(HealthDay)—Daily topical latanoprost may help stop progression of

myopia, offering a potential new treatment for the condition, according to an experimental study presented at the annual meeting of the Association for Research in Vision and Ophthalmology, held from May 7 to 11 in Baltimore.

Nevin El-Nimri, O.D., and Christine F. Wildsoet, O.D., Ph.D., from the University of California Berkeley, performed monocular form deprivation (FD) in young guinea pigs from age 14 days for 12 weeks. After the first week, FD eyes received daily topical latanoprost or vehicle (four each).

The researchers found that relative to vehicle treatment, latanoprost reduced intraocular pressure (IOP) and slowed myopia progression. There were changes in the mean interocular IOP differences from baseline values of −0.58 ± 0.94 mm Hg and −1.25 ± 1.1 mm Hg for vehicle and latanoprost to 0.56 ± 1.34 mm Hg and −7.11 ± 3.66 mm Hg, respectively. There were changes in the interocular optical axial length differences, from −0.01 ± 0.04 to 0.22 ± 0.13 mm Hg for vehicle and from −0.05 ± 0.06 to −0.01 ± 0.05 mm Hg for latanoprost. Compared with vehicle eyes, in latanoprost eyes the fluctuations in IOP appeared to be lower and less variable, although the difference was not significant.

"The results demonstrate that daily topical latanoprost is effective in both lowering IOP and slowing myopia progression in FD eyes of young guinea pigs," the authors write.

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