

Hormone replacement therapy may protect against eye disease

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Women who took estrogen-only hormone replacement therapy after ovary removal had a lower risk of developing glaucoma, according to research presented today at AAO 2017, the 121st Annual Meeting of the American Academy of Ophthalmology.

This research, which was conducted at Wilmer Eye Institute at Johns Hopkins University, Stanford University, and the University of California, San Francisco, appears to reaffirm earlier research that showed a higher lifetime exposure to [estrogen](#) is linked to a lower risk of developing [glaucoma](#), suggesting a possible new preventative treatment path. It has been hypothesized that estrogen deprivation from ovary removal may be a risk factor for developing glaucoma, one of the leading causes of blindness, affecting nearly 60 million worldwide.

The researchers conducted their study using 2005-2008 data from the National Health and Nutrition Examination Survey NHANES. The survey included 3,406 female participants aged 40 years or older from across the United States who completed the survey's vision and reproductive health questionnaire and underwent eye exams.

They found that earlier age at ovary removal was associated with a 6 percent per year higher chance of self-reported glaucoma in African-American women. However, all women who had their ovaries removed and used estrogen-only hormone replacement therapy had a 9 percent lower odds of having glaucoma each year they took estrogen-only hormone replacement therapy.

"While this study doesn't directly answer the question of why estrogen appears to guard women from glaucoma, it seems likely that estrogen may protect against the nerve damage that happens to the eye in glaucoma patients," said lead researcher Mary Qiu, M.D., an ophthalmologist at Wilmer Eye Institute. "Future studies should

address the potential role of glaucoma screening and [hormone replacement therapy](#) in [women](#) undergoing ovary removal."

Previous studies have shown that a range of factors that reduce a woman's exposure to estrogen over her lifetime - starting menstruation at an older age, using oral contraceptives, going through menopause at a younger age or having their ovaries removed at a younger age - are all associated with a higher risk of developing glaucoma.

Provided by American Academy of Ophthalmology

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