Vitreomacular adhesion patients report improved vision with non-surgical treatment

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In two ancillary studies of two multi-center international clinical trials led by the University of Southern California (USC) Eye Institute, the injectable drug ocriplasmin appears to improve vision among patients suffering from symptomatic vitreomacular adhesion (VMA), a condition related to the aging eye that could cause permanent vision loss if left untreated.

'These are the first large studies that document patient-reported visual improvement after injection of ocriplasmin for symptomatic VMA,' said Rohit Varma, M.D., M.P.H., director of the USC Eye Institute and lead author of the study. 'These improvements were achieved without surgery, consequently avoiding the risks, recovery time, possible complications and costs associated with surgery. This is an important finding in our search for safer and more effective treatments to prevent blindness.'

As the eye ages, it is normal for the vitreous—the thick clear gel that fills the center of the eye—to liquefy and separate from the back of the eye, called the retina. In some cases, parts of the vitreous remain attached to and may pull on the retina, causing vision distortion, vision loss and even blindness. Previous studies have estimated that 1.5 percent of the population suffers from eye diseases associated with or caused by VMA. The standard of care for VMA patients at high risk for vision loss is a vitrectomy, or surgical removal of the vitreous.

In the two randomized and masked Phase 3 clinical trials, researchers at
the USC Eye Institute in Los Angeles, Wills Eye Hospital in Philadelphia and Cole Eye Institute in Cleveland studied 652 patients with symptomatic VMA who opted for treatment with ocriplasmin at clinic-based centers in the United States and Europe. Across the two studies, 464 patients received the drug and 188 received a placebo. The study investigators performed complete eye examinations at regular intervals before and up to six months after injection, with the option to recommend and perform surgery if vision deteriorated.

As described in the June 11 issue of the peer-reviewed journal *JAMA Ophthalmology*, the patients treated with the ocriplasmin injection reported greater improvements in vision-related activities and visual function and were less likely to have experienced worse vision at six months when compared to patients who received the placebo.

Ocriplasmin, marketed as Jetrea by the biopharmaceutical company ThromboGenics, was approved by the Food and Drug Administration in 2012 and commercially launched in 2013. The clinical studies and analyses were funded by ThromboGenics. Varma serves as a consultant for Aerie, Allergan, AqueSys, Bausch and Lomb, and Genentech.


Provided by University of Southern California

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