

## One-of-a-Kind Telescopic Implant Restores Sight in Patients with Advanced Macular Degeneration BY EMILY TURK

MedStar Georgetown University Hospital is the only hospital in the region offering an innovative new surgical procedure for patients with advanced macular degeneration (AMD). The implantable miniature telescope, recently approved for use by the FDA, is providing patients with end-stage dry AMD with their first viable treatment option.

Dr. Jay Lustbader, chair of Ophthalmology at MedStar Georgetown, is the only surgical specialist in the region trained to perform the procedure and says the implant is offering "hope for thousands of older Americans whose impairment has robbed them of any real functional vision."

**"This is the first viable treatment option for patients with dry advanced stage macular degeneration. It's very rewarding to be able to give these patients independence and improved quality of life."**

**Dr. Jay Lustbader**  
Chair, Department of Ophthalmology

Millions of older men and women suffer from dry macular degeneration and most continue to function day-to-day. But a subset of patients with end-stage disease are legally blind—unable to read, watch TV or perform routine self-care.

"Up to now, we haven't been able to offer these patients any effective therapy," said Lustbader, who has performed three successful



Dr. Jay Lustbader (front) is the only surgical specialist in the Washington, D.C. region trained to perform a new procedure for patients with advanced macular degeneration.

telescope implant procedures. "It's very rewarding to be able to give them independence and quality of life," he added.

The implant, shaped like a miniature telescope, actually operates like a magnifying glass, Lustbader explained. "In people with dry AMD, scarring of the macula impairs their central vision. While peripheral vision remains intact, patients suffer from a blind spot in the center of their visual field. The implant serves to magnify the central vision and decrease the blind spot's effect."

During the hour-long outpatient surgery, the lens in one eye is removed, exactly as it would be during an intraocular lens procedure. "But we make a larger incision of 12 mm in the sclera to fit the telescopic implant, which is

about the size of a pea and five times thicker than a lens implant," Lustbader explained. "We lift the cornea and implant the device in the center of the chamber, ensure it is securely in place, and suture the incision."

Improved sight isn't immediate, Lustbader noted. "Patients need to learn how to use the implant. They will typically meet several months with a low vision therapist at the Hospital for visual rehabilitation."

Candidates for the procedure must be carefully evaluated first by a retina specialist and meet a set of criteria, including being at least 75 years old and never having had cataract surgery in the eye that is to receive the telescope.

"Patients undergo a thorough assessment to be certain they are appropriate candidates for the surgery," Lustbader said. "But for the right patient, this is a promising therapy."

A clinical trial of more than 200 patients demonstrated that the implant, on average, improved vision significantly. With the number of people with end-stage AMD expected to reach 2.9 million by 2020, this is a significant medical advancement, which could have a real impact on the public's health.

Physicians who believe their patients may benefit from the procedure should refer patients for evaluation by calling CentraSight at **1-877-99-SIGHT** (877-997-4448). Retina specialists may refer patients to Dr. Lustbader by calling **202-877-4448**.