Cataract surgery does not appear associated with worsening of age-related macular degeneration

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Age-related macular degeneration does not appear to progress at a higher rate among individuals who have had surgery to treat cataract, contrary to previous reports that treating one cause of vision loss worsens the other, according to a report in the November issue of Archives of Ophthalmology.

Cataract is the leading cause of blindness worldwide and age-related macular degeneration (AMD) is the leading cause of blindness among Americans age 65 and older, according to background information in the article. Surgery is the most effective and common vision-restoring treatment for cataract. "Because both conditions are strongly age-related, many individuals with cataract also have AMD," the authors write. "There has been a long-standing controversy among clinicians as to whether cataract surgery is contraindicated in eyes with non-neovascular AMD. A major concern has been whether cataract surgery increases the risk of progression to neovascular AMD [an advanced form of the disease involving formation of new blood vessels] in eyes at risk of progression such as those with intermediate AMD."

Li Ming Dong, Ph.D., of Stony Brook University School of Medicine, N.Y., and colleagues studied eyes of 108 individuals with non-neovascular AMD who underwent preoperative assessments for cataract surgery between 2000 and 2002. Photographs of the retina were taken and fluorescein angiography, which uses a special dye to investigate
blood vessels in the eye, was performed. A total of 86 evaluated eyes had non-neovascular AMD before surgery, and 71 had follow-up assessments between one week and one year after surgery.

Neovascular AMD was observed in nine (12.7 percent) of these 71 eyes at one or more follow-up assessments. Five eyes displayed signs of neovascular AMD at the one-week follow-up point; the size and location of the lesions identified indicated that they may have been present before surgery but not visible due to the opaque lens caused by cataract. When these eyes and one eye that did not have one-week follow-up photographs available were excluded, the progression rate between one week and one year decreased to three of 65 eyes (4.6 percent). The rate of progression to neovascular AMD was similar among participants' other, cataract-free eyes over the same time period (one eye, or 3 percent).

"Our findings suggest that previous reports of the association or progression of non-neovascular AMD to advanced AMD after cataract surgery could be biased with the absence of immediate pre-operative and postoperative fluorescein angiography to rule out pre-existing neovascular AMD or geographic atrophy," the authors write. "Subtle signs of neovascular AMD or geographic atrophy, even on an angiogram, may be obscured by lens opacity just prior to cataract surgery. In such cases, the neovascular disease or the geographic atrophy may contribute to the individual's vision loss, and this may erroneously be ascribed to the cataract and contribute to a decision to proceed with cataract surgery."

"Our findings do not support the hypothesis that cataract surgery accelerates the progression of AMD," they conclude.


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