

CLINICAL ABSTRACTION

RESEARCH

FOR CATARACT RISK, MOVEMENT MAY MATTER

In the past, epidemiological researchers have made the connection between a high body mass index and an increased risk of cataracts.

“That result has come from a lot of large-scale epidemiological studies: Framingham, Blue Mountain, even AREDS,” says Gregory Wolfe, O.D., M.P.H., associate professor at the Southern College of Optometry in Memphis, Tennessee.

But what about the factors that play a part in a high body mass index? For example, what role does long-term physical activity play when it comes to the risk of cataracts? That question was at the heart of a large prospective cohort study from Sweden, “Long-Term Physical Activity and Risk of Age-Related Cataract,” published in *Ophthalmology*.

Researchers examined data from 23,853 women and 28,807 men ages 45 to 83, with a mean of 12.1 years of follow-up. During the study period, the researchers found 11,580 cases of age-related cataract and cross-checked those cases against baseline and subsequent assessments of physical activity.

“Our results suggest that higher levels of total physical activity both at baseline and long-term are associated with decreased risk of cataract,” says Jinjin Zheng Selin, a doctoral student and corresponding author on the study.



60-plus minutes
The amount of time per day of bicycling or walking associated with a reduced risk of cataracts in a Swedish cohort study

Study subjects with the most physical activity in total experienced a roughly 13 percent decrease in risk of developing cataracts compared with those with the least activity. However, specific findings indicated that types of activity—and even the person’s occupation—were also factors.

“We examined different types of physical activity, and our results showed that walking or bicycling (more than 60 minutes per day versus hardly ever) and work or occupational activity (heavy manual labor versus mostly sitting) were both associated with 12 percent and 16 percent decreased risk of cataract, respectively,” Selin notes.

Despite the seeming implications of such findings, the research team urges caution in interpretation. “Our results should be confirmed by other studies in the

future—e.g., intervention studies or prospective cohort studies—examining the association between different types and intensity of physical activity and risk of cataract in other populations.”

“Other populations” is a key phrase in that statement, says Dr. Wolfe, who did not work on the study but offers perspective. For example, in this study, people of lower income also tended to have a lower body mass index. It’s speculation, but could this be because of such factors as affordability of cars and the resulting popularity of bicycling in Sweden? In the United States, lower income generally correlates to a higher body mass index. So a large cohort study with a similar model in this country might yield different findings.

“In addition, any cohort study is only going to show you the association of something,” Dr. Wolfe notes. “You’re saying that physical activity level is associated with cataract. It’s not causation. To show that, you would need to do an intervention study or bench study to show the mechanism. But this study absolutely sets up the opportunity for that type of research.”

It’s also yet one more piece that supports the idea that ODs should have honest conversations with patients about obesity, physical activity and other contributing factors to preventable blindness, he says.

“As optometrists, we’re used to talking about visual health and hygiene,” Dr. Wolfe says. “We give tips such as, ‘Look away from your computer every few minutes to reduce strain.’ Well, why not incorporate physical activity into those recommendations, too?”

—Chris Blose