with Alzheimer's disease undergo changes (observable with special brain-imaging methods) many years before a diagnosis is typically made. So getting a baseline neuropsychological assessment in middle age or a little older may help identify who should be targeted for more active Alzheimer's prevention.

#### YOUR NEXT STEPS

If you do well on the cognitive tests but remain worried about memory decline, work hard to keep what you have.

TO ACHIEVE THIS (AS WELL AS MAINTAIN GOOD OVERALL HEALTH), FOLLOW THESE LIFESTYLE CHOICES: Eat a healthful diet...get regular exercise...participate in brain-stimulating activities you enjoy...keep your blood pressure under control...and moderate your alcohol intake.

For a patient newly diagnosed with early-stage Alzheimer's, I often recommend that he stop driving as a safety measure, advise him to keep written notes and calendars to aid recall and suggest that he talk with his doctor about whether a prescription Alzheimer's drug might help improve mental function. I also recommend beginning a discussion of future care needs and end-of-life plans with family.

As for people who fall in the middle and display some signs of MCI, I often explain that the "senior moments" they're experiencing might be the beginning of something more serious...or they might mean nothing at all.

**THE BEST WAY FORWARD**: Follow the blueprint for patients who tested well cognitively—live a healthful lifestyle, and try to avoid "stressing out." (I often recommend mindfulness-based stress reduction programs.) Then I'll reevaluate them in a year and take other measures if needed.

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**David F. Chang, MD** University of California, San Francisco

# **The Cataract Fix**

What are you waiting for?

o one wants to have surgery—any surgery. But once you have had cataract surgery, you'll probably wonder why you waited so long.

**RECENT DEVELOPMENTS:** Cataract surgery now takes about 20 minutes for most people. You'll go home soon after the procedure... serious, vision-threatening complications, such as infection, are extremely rare...and it's successful in about 99% of cases, making it one of the most effective of *all* surgeries.

The benefits are undeniable. Within days, you'll see better with sharper vision, better nighttime eyesight and fewer bright-light "halos." But that's not all.

The procedure, which is usually done on one eye at a time, is performed while you're awake and while your eye is numbed with eyedrop anesthesia, so it's not even painful. Most health insurance plans pick up the tab.

To learn more about the latest advances in cataract surgery, *Bottom Line Health* spoke with David F. Chang, MD, a noted authority on cataract techniques.

#### **IS IT YOUR TIME?**

Most people are familiar with the telltale signs of cataracts—the normally clear lens within your eye becomes cloudy and/or discolored. Because the lens focuses incoming visual images and transmits them to the retina, these changes, though generally gradual (occurring over a period of years), can cause significant vision loss if untreated.

**IMPORTANT:** The lens sits behind the iris and pupil, so you can't selfdiagnose cataracts by looking in a mirror. Only an eye doctor using a special microscope can actually see your cataracts.

That's why it's important to see an eye doctor (in addition to routine eye exams) if you're experiencing vision problems, such as blurred vision, difficulty seeing details (such as colors or small objects) and/or poor night vision.

Age is the main risk factor for cataracts. When you're young, the proteins that form the lenses of your eyes are arranged in a way that makes the structures crystalclear. Over time, these proteins eventually start to clump together and reduce the amount of light that passes through.

By your 60s and 70s, these changes will have gradually begun to occur. Most people, if they live long enough, will develop cataracts that

Bottom Line Health interviewed...

**David F. Chang, MD,** clinical professor of ophthalmology at University of California, San Francisco, and past president of the American Society of Cataract and Refractive Surgery. He is an international author-

ity on cataract surgery who frequently lectures surgeons about advanced cataract techniques and the newest lens implants. He is coauthor of *Cataracts: A Patient's Guide to Treatment.* 



>> are advanced enough for them to consider surgery.

Earlier-onset of cataracts have been associated with such risk factors as smoking, diabetes, prior retinal surgery, excessive sun exposure and the prolonged use of certain medications such as steroids.

#### WHY WAIT TO HAVE SURGERY?

Cataracts can affect one or both eyes, either simultaneously or at different times. In the past, doctors advised patients to delay surgery until a cataract was "ripe"—meaning that it was so advanced that the benefits justified the lengthy recovery and the potential for complications due to the large incision that was used at that time. Unfortunately, many people are still operating under this misconception.

**NEWER THINKING:** You don't need to wait so long. If the cataract is impairing your daily activities, such as reading and/or driving, it makes sense to have cataract surgery sooner rather than later because of the procedure's exceptionally high success rate.

Now the lens is broken up into many small pieces using ultrasonic vibrations within the eye, then suctioned out. The incisions are so small that stitches aren't required—and cataracts can be safely removed at an earlier stage. The replacement artificial lens lasts a lifetime and is folded so that it can pass through the tiny (about oneeighth inch) incision.

The timing is important because cataracts can get so bad that they increase a person's risk for falls and auto/pedestrian accidents, as well as contribute to depression.

These factors may have something to do with the recent research regarding cataract surgery that was published online in the journal *JAMA Ophthalmology*.

**KEY FINDINGS:** This study of more than 74,000 women ages 65 and older found that those who had undergone cataract surgery had a 60% lower risk of dying over the 20year study period than those who didn't get treated.

#### BETTER VISION WITHOUT GLASSES

You'll obviously see better once a cataract is removed. What some people don't realize is that they might see better than they *ever* did.

The surgeon will remove the cloudy lens and replace it with a clear, artificial lens that comes in more than 50 different powers.

Suppose that you have always worn glasses to see well in the distance. When you have cataract surgery, a replacement lens can be chosen to correct your particular type/degree of optical error. For example, some lenses correct for *astigmatism* (blurred vision that may be caused by incorrect corneal curvature). Certain artificial lenses function like bifocals and reduce how frequently people must rely on reading glasses.

In most cases, cataract surgery won't completely eliminate the need for glasses. Most people will have excellent distance vision without glasses following cataract surgery. However, most will need reading glasses—but can perhaps use them less often and/or get by with a lower-power prescription.

#### WHAT ELSE CAN YOU DO?

Surgery is the only treatment for cataracts, and it's a permanent fix—the new lens will stay transparent forever. Unfortunately, there is no medication that can halt or reverse cataract formation. What can one do to prevent cataracts?

• Wear sunglasses outdoors. The UV radiation in sunlight damages eye proteins and can lead to cloudiness. A large study that reviewed data from more than a half million people found a strong association between cataracts and skin cancer—more evidence that UV exposure is a major risk.

WHAT TO DO: Wear sunglasses

The cataract is replaced with a clear, artificial lens that comes in more than 50 different powers.

with UV protection whenever you plan to spend prolonged periods of time outdoors. Virtually all sunglasses today are UV protected. Wraparound glasses are ideal.

• Wear a broadbrimmed hat to block UV radiation. It will reduce your risk for eyelid can-

cers as well as cataracts.

• Eat a nutritious diet. Many studies have found an association between a healthy diet and fewer cataracts—but that's not the same as proof.

For example, several studies have suggested that particular nutrients—alone or in combination—can help prevent cataracts. The large AREDS (Age-Related Eye Disease Study) trial reported that people with cataracts who got the most lutein and zeaxanthin (antioxidants found in leafy greens and other fruits/vegetables) were 32% less likely to need cataract surgery.

Other research has looked at the effects of fish oil supplements (or regular meals including fatty fish)...vitamin C...vitamin E...and other nutrients.

It's common sense to eat a nutritious diet. If you want to take one of the AREDS formulations, check with your doctor first if you are a current or former smoker. Certain versions of these supplements (with lutein and zeaxanthin) also contain beta-carotene, which has been linked to increased risk for lung cancer in current and former smokers.

### Coming soon in Bottom Line Health

- Flu vaccines: Important facts most people don't know.
- The new secret to getting a great night's sleep.
- Are these hidden dangers lurking in your home?
- "Sitting disease": Best approaches to beating it.