The Aging Eye

Is there any part of our bodies that doesn't shrink, wither, soften, or sag as we age? It's a slippery slope from worrying about SkyMiles and turf builder to fretting about ear wax and dietary fiber. And it's just a matter of time until we learn the distinctly unflattering names for all the new wrinkles, creases, and folds that show up in the mirror. Turkey wattles, dewlaps, marionette's lines, crow's feet—good grief, even our earlobes droop.

We seem resigned to the idea that old folks have trouble getting around, are hard of hearing, and have poor eyesight. Leading eye care researchers and clinicians, though, are calling for a shift in the way we think about vision and aging. The fact is, low vision can often be delayed or prevented with appropriate screening, diagnosis, and treatment.

The aging process

The first Baby Boomer turned 60 in 2006. Every day since then, about 8,000 Boomers have passed that milestone. More than half of them will develop an age-related eye disease. A recent survey, however, showed that older Americans are less concerned about retaining their sight than they are about shedding some extra pounds and managing their back pain. They seem unaware of what's at stake, or perhaps they believe there's nothing they can do to preserve their vision.

Aging is sometimes called senescence (pronounced suh-NESS-uhnts), from a Latin word meaning "to grow old" (the words "senator" and "senile" share the same root, incidentally). During the process of senescence, the rate of cell division slows and physiologic functions become impaired. Many cells, such as the delicate cells of the inner ear, die and cannot regenerate.

It's nearly impossible to say what "normal" aging is. Many variables, such as lifestyle choices, genetic makeup, and exposure to chemicals and disease-causing agents, interact in unpredictable ways within any given person.

Aging bodies, aging eyes

Nevertheless, we can make some broad statements about how our eyes age. Most of us, for instance, become farsighted—or less nearsighted. As the the iris muscle and other body tissues lose their elasticity, pupil response slows and vision diminishes in especially dim or bright light. The eyes may become either too dry or too watery. The retina thins, and the lens of the eye becomes cloudy and discolored. Serious eye diseases, such as age-related macular degeneration (AMD), glaucoma, cataracts, and diabetic retinopathy, may make an unwelcome appearance.

Of course, these changes take place in the eye as the rest of the body ages and often develops systemic (system-wide) disease. Obesity and associated diabetes may result from years of creeping weight gain and lack of physical activity. High blood pressure and cardiovascular disease may be linked to obesity or can develop independently. Arthritis often sets in. And decades of smoking, heavy drinking, illegal drug abuse, or excessive sun exposure may begin to exact a toll on the body.

Reducing your risk of age-related eye diseases

You can't control the passage of time, but you can do a great deal to preserve your sight as you age:

• Be aware of your risk factors. You need to know what genetic factors, lifestyle choices, diseases, and exposures place you in a higher risk category for certain diseases so that you and your vision care provider can adjust your screening intervals accordingly. For

recommended screening guidelines, see Reducing the Risk of Cataracts, Reducing the Risk of Glaucoma, Reducing the Risk of Wet Age-Related Macular Degeneration, and Reducing the Risk of Diabetic Retinopathy.

- Have a baseline eye exam at age 40 if you are an adult with no risk factors for cataracts, glaucoma, AMD, or diabetic retinopathy. People who have no vision problems or obvious risk factors should have a baseline eye examination at age 40, to establish a standard against which future exam results can be compared.
- Get screened earlier or more frequently screening if you have risk factors for cataracts, glaucoma, AMD, or diabetic retinopathy. If you have diabetes, high blood pressure, or a family history of eye disease, for example, or if you fall into a high-risk ethnic group, you should receive thorough eye examinations more often. Click on the links above for lists of risk factors and recommended screening intervals.
- Cooperate with your vision care provider. This advice applies to examinations, preventive measures, treatment, and follow-up care. If you have diabetes, for example, you should have a comprehensive dilated eye examination annually. If you have glaucoma, you should use your eye drops daily as prescribed. If you have AMD and your provider has asked you to test your vision with an Amsler grid, you should do so every day. After cataract surgery, you should wear your eye shield and use your antibiotics as your provider has instructed.

The only fountain of youth any of us has is the ability to make good lifestyle choices. Be sure to review the 2008 Physical Activity Guidelines for Americans and the Dietary Guidelines for Americans for information about getting enough physical activity and selecting nutritious foods. Heck, between keeping up with our exercise and attending to our vision care regimen, we hardly have time to think about those crepey wrinkles around our eyes.