THE AGING EYE

WILLIAMSBURG EYE CARE
Richard K. Lodwick, O.D.
The Aging Eye

Survey Shows Americans Lack Critical Facts about Maintaining Eye Health

--National Eye Institute
www.nei.nih.gov
The Aging Eye

According to research from Prevent Blindness of America and the National Eye Institute titled Vision Problems in the U.S., "Millions of Americans are currently living with age-related eye disease."

--Medical News Today
The Aging Eye

- 130 million Americans aged 40 and older
- 30 million suffer from leading causes of vision loss such as macular degeneration, cataract, glaucoma and diabetic retinopathy
The Aging Eye

"Our research shows that vision loss continues to threaten the quality of life for millions of Americans." Therefore, the public must be educated about the benefits of regular eye care.

--Prevent Blindness of America
Topics

- Macular Degeneration
- Cataracts
- Glaucoma
- Retinopathy—Diabetic, Hypertensive, Hypercholesterolemia
- Dry Eye Syndrome
Eye Anatomy

- Vitreous gel
- Optic nerve
- Macula
- Fovea
- Retina
- Cornea
- Pupil
- Lens
- Iris
Age-Related Macular Degeneration

- Two million Americans diagnosed with AMD (25% increase since 2002)
- Disrupts central vision without pain
- Two forms: DRY and WET
- Majority have DRY
- Most loss of vision is due to the WET form
- Development of blood vessels differentiates wet from dry—THEY LEAK
ARMD Signs and Symptoms

- Reduction of central vision
- Straight lines may appear curved
- Visual changes—i.e. blurred vision
- Painless
ARMD Risk Factors

- Age
- Ultraviolet light
- Smoking and obesity
- Race
- Gender
- Family history
ARMD Prevention—Reducing Risk

- UV light protection
- Quit smoking
- Exercise
- Diet rich in fish and green leafy vegetables—good sources of omega-3 fatty acids and antioxidants, including lutein and zeaxanthin
Cataracts

- 22.3 million American adults have cataracts
- Opacification of the lens
- Different types of cataracts, depending on location
- Removal of cataracts is a quality of life issue
Cataracts—Signs and Symptoms

- Gradual, painless reduction in vision
- Glare and/or halos from lights
- Decrease in color brightness
- Reduced night vision
- Double vision with one eye covered
Cataracts
Cataracts
Cataracts—Risk Factors

- Increasing age
- UV light exposure—accumulative
- Smoking
- Trauma
- Medication
Cataract Prevention—Reducing Risk

- Limiting UV light exposure—UV blocking sunglasses at an early age
- Quit smoking
- Antioxidants
Glaucoma

- 2.29 million have glaucoma
- Loss of vision, peripherally inward
- Damages the optic nerve and retinal nerve fibers
- Typically due to elevated pressure within the eye
Glaucoma—Signs and Symptoms

- Typically painless
- Tunnel vision
- Blurred vision
- Reduced night vision
Glaucoma—Risk Factors

- Increased intraocular pressure
- Appearance of optic nerve
- Race
- Family history
Glaucoma
Glaucoma—Reducing Risk

- Early detection is key
- Treated with eye drops
- Surgical treatments
Retinopathy

- Diabetes—4.4 million affected by diabetic retinopathy
- High blood pressure
- High cholesterol
Retinopathy—Signs and Symptoms

- Reduction in vision
- Sudden onset
- Grey, black, missing, blurred
Retinopathy—Reducing Risk

- Get involved in managing your health
- Education
- Follow recommended appointment schedules
- Ask your internist/specialist questions
Retinopathy—Diabetes
Diabetes
Diabetes
Dry Eye Syndrome (DES)

- Disrupts overall vision
- Reduced tear production
- Unstable tear film, leading to rapid evaporation
DES—Signs and Symptoms

- Burning
- Sandy or gritty feeling
- Tearing, watery eyes
- Redness
- Episodes of fluctuating vision
- Reduced visual attention
DES
DES—Risk Factors

- Increasing age
- Environmental—colder months
- Autoimmune disease—i.e. Sjogrens syndrome
- Females>Males
- Medication—i.e. antihistamines & decongestants
- Poor lid hygiene
- Chemical irritants—i.e. cigarette smoke
DES—Reducing Symptoms

- Dependent on cause and severity
- Improved lid hygiene
- Heat
- Artificial tears
- Diet—omega-3 fatty acids
- Prescription anti-inflammatory
Conclusion

As we reach our 60’s and beyond, prevention of cataracts and macular degeneration (AMD) may not be as critical as being appropriately diagnosed and treated. While minimizing the amount of UV light entering the eye can still benefit us, for many the damage has already been done. Because the damage can begin at an early age, it may be as important, if not more so, to make sure our children and grandchildren are aware of ways to reduce risk.

As we become more aware of how to take better care of ourselves, we should pass that information onto our loved ones; that may be the real benefit of preventing loss of vision later in life.

--Richard K. Lodwick, O.D.