Patient focus

Women’s Eye Health

Women’s Eye Health.org was formed in response to the troubling reality that two-thirds of the world’s population of blind and visually impaired people are women and many of them are living in underdeveloped countries. The organization’s mission is to educate people regarding those eye diseases that:

· Are intrinsically more prevalent in women
· Occur more often in women because they live longer than men
· Are exacerbated by nutritional habits, smoking, and/or environmental insult

Of the common eye diseases, dry eye syndrome, autoimmune diseases, and certain forms of cataract are more prevalent in women. Women in industrialized nations tend to live longer than men and develop more age-related afflictions. In developing countries, infectious diseases such as trachoma are more prevalent in women and, in some areas of the world, women have less access to medical care.

Trachoma, the world’s leading cause of preventable blindness, occurs after years of repeated infection with a microorganism, *Chlamydia trachomatis*. The infection and re-infection process begins in early childhood and may continue to adulthood because as mothers, grandmothers, and older sisters who care for children are excessively and continually exposed to the bacterium. Crowded living conditions, lack of sufficient water
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and sanitation services, and contact with flies and fly-breeding sites near homes are some of the many risk factors for development of trachoma. It is transmitted by contact with ocular and respiratory secretions.

As a result of repeated infections and inflammation, scarring develops on the inside of the eyelid and the eyelashes eventually turn inward. As the eyelid turns inward, eye lashes begin to scratch and create scars on the cornea. This leads to severe vision loss and eventually blindness, often in relatively young adults.

As the education and economic welfare of a community rises, trachoma decreases. The World Health Organization (WHO) along with the Alliance for Global Elimination of Trachoma by the year 2020 has adopted the “SAFE” strategy to combat this infection. It includes:

Surgery - to correct end-stage disease
Antibiotic treatment
Facial cleanliness - frequent face washing
Environmental improvement - improved water supply and sanitation facilities

It has been estimated that 75% of blindness and vision loss is either preventable or treatable. You can optimize your eye health by practicing a healthy lifestyle, having regular eye exams, and protecting your eyes from injury.

Source: Women’s Eye Health.org
Pregnancy and the Visual System

A woman experiences many physical changes throughout her pregnancy, including changes in her vision. Some of these changes are temporary and reversible following the birth of the baby and/or when the woman stops breastfeeding. Others can be permanent and vision threatening.

Hormonal changes and fluid retention can cause a change in a pregnant woman’s eyeglass prescription. Some women may have trouble tolerating the use of contact lenses during pregnancy. If you experience changes, you should schedule an exam with your eye doctor.

If you have been diagnosed with glaucoma and have plans to become pregnant, it’s important to talk with your eye doctor so that the proper adjustments to your glaucoma medication can be made. Some medications may cause birth defects during the first trimester of pregnancy. Your doctor will also want to closely monitor your intraocular pressures throughout the pregnancy.

Some women experience elevated blood pressure and/or blood sugar levels while pregnant. These conditions could lead to the development of hypertensive or diabetic retinopathy.

Many women experience no changes in their visual system while pregnant; however, due to the possible complications described above, it is important to make an appointment with your eye doctor as well as an obstetrician at the beginning of
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your pregnancy. If you have diabetes or an existing eye condition such as glaucoma, please consult with your eye doctor prior to becoming pregnant.

Source: excerpts from a presentation at the American Academy of Ophthalmic Photographers’ 2008 annual meeting by Corrina Reeves, COA, Penn State Hershey Eye Center technician

Interesting Facts

Did you know that . . .

• The giant squid has the largest eyeball on the face of the earth, estimated to be about the size of a beach ball. The squid pictured to the right was caught off the coast of Antarctica last year, frozen, and then thawed for scientific study at the national museum of New Zealand. His eye measures 11 inches in diameter and has a lens the size of an orange.

What’s happening in Eye Care Research?

Clinical trials that are currently underway at the Penn State Hershey Eye Center are listed on the website of the Clinical Trials Office along with contact information for each study at:

http://www.pennstatehershey.org/web/eyecenter/research/clinicaltrials