

EYE-Q

by R. Thomas Barowsky, MD

Sunglasses and Eye Protection

Spring has sprung and the days are getting longer and warmer. That means spending more time outdoors enjoying all that North Carolina summers have to offer. It also means that those nasty ultraviolet rays from the sun will be more intense. This is why May is designated as National Ultraviolet Light Awareness Month.

We all know what happens to our skin when we don't protect it from the sun's harmful rays. But do we give much thought to what those same rays are doing to our unprotected eyes? Ultraviolet rays are invisible rays of light that can be broken down into two main categories; ultraviolet A also known as UVA and ultraviolet B or UVB. UVA and UVB are responsible for giving us our suntans (or sunburns if we aren't careful). They also are responsible for certain skin cancers and skin aging.

The eyes can suffer their own problems with UV rays. In addition to skin cancers of the eyelids, thickened vascular growths on the sclera of the eye called pterygia can be difficult to control and treat. Left alone they can grow across the clear cornea causing distortion of the surface of the cornea with scarring. These are commonly seen in patients who spend a considerable amount of time out in the sun without proper eye protection. As you can imagine, people raised and living in the tropics will have a significant increase in the risk of developing these vascular scars. Fortunately, newer surgical procedures can remove these sight threatening scars safely and with a good assurance they may not grow back.

Over exposure to UV rays such as after a day at the beach or a day out fishing on a lake or the ocean can also cause photokeratitis. This painful but reversible condition that causes temporary blindness, severe light sensitivity and a feeling that the eyes are on fire with thousands of razor blades rubbing the eye is also referred to as welder's burn.

Patients who have greater than normal exposure to UV rays such as farmers, field hands, construction workers and others risk the early development of

cataracts and an increased incidence of damage to the central retina causing an earlier onset of macular degeneration

The greatest risk of damage caused by UVA and UVB rays is between 10:00am and 4:00 pm. There is some degree of protection when the sky is overcast but this is minimal. Now that you think I have ruined your plans for the summer with all this bad news there is in fact, some good news. You can protect your eyes from these conditions with two simple exercises: wearing sunglasses that have 100% UVA and UVB protection and wearing a brimmed hat which will block approximately 50% of UV light from above. But remember, the hat offers no protection from reflected UV light off the surface of the water or sand.

Next week I'll talk about the different types of protection that eyewear can provide when enjoying the summer sun.

If you have questions about your eye health e-mail Dr. Barowsky at doctom@tdkj.com and we'll try to answer your questions here at Eye-Q.