

SUNLENSES

LENSES
& FRAMES

THE EYE NEWSLETTER • VOLUME XXII • WINTER, 1998
ROBERT M. SCHARF, M.D. • (972) 596-3328

There is more than one way to block the sun. And that is the dilemma we face as we present sunlens options to our patients. Thanks to technological advancements in areas such as polarization, photochromics and tinting, we have more choices than ever as we assist our patients who are seeking protection from the sun's rays. What products give our patients the best quality sun protection available?

According to national studies on selling sunlenses, the decision is not as simple as picking one product for all patients. Indeed, a patient's sunlens needs can vary based on their prescription, frame selection and lifestyle. When we present our patients with sunlens options, we specify what they can use them for, what they can't use them for, and why they're good. With all of the different sunlens options out there, and all of the different needs patients have, we have to be knowledgeable about the choices we offer them.

POLAR PEOPLE

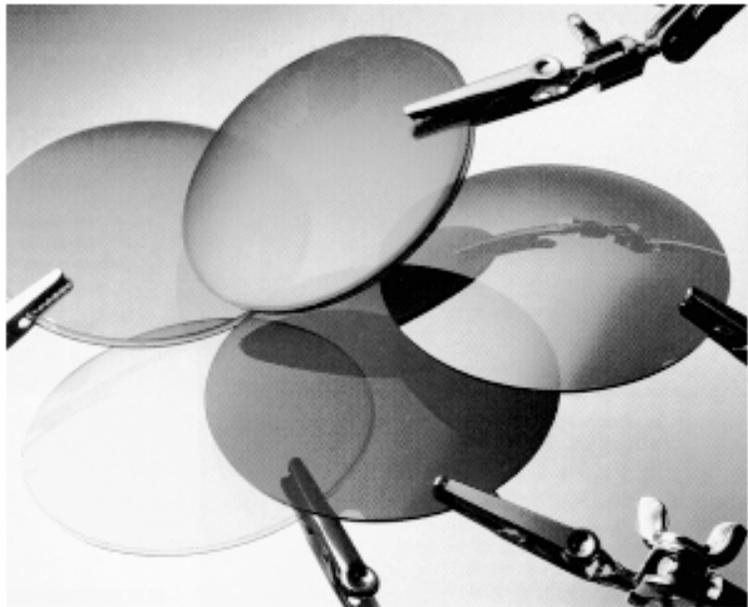
One of the most intelligent choices, it seems, has been polarized sunlenses. Polarized lenses are specifically designed to reduce or eliminate glare (reflected or bounced light from a smooth surface such as roads, water, snow or ice) by selectively absorbing the light waves traveling in all directions except the vertical plane. Whether these are sold as secondpair sunglasses or sunglass clips, these features make polarized lenses ideal for activities such as water sports (i.e., boating, fishing, and golf because of the lakes on the course) as well as driving. Occasionally, we even recommend polarized filters for patients who are light-sensitive or who complain of glare from their computer screens at work.

Dispensers have been selling a lot more polarized lenses recently because of improvements made in the product. Thanks to new methods for polarizing lenses, manufacturers have improved the durability of the product and expanded the number of lens options available. Polycarbonate lenses, which have a polarization film added to the base material when it is still in liquid form, are now among the most popular polarized products sold.

For sunwear, polycarbonate is an added benefit. There is a reduction in weight and an increase in durability for active wearers. The weight reduction is important because many of the popular sunwear styles have an increased eye size, meaning that the lens is bigger.

Manufacturers have also worked to make polarized products more compatible with optical and cosmetic lens treatments such as ultraviolet, scratch-resistant and anti-reflective (A-R) coatings. For patients concerned about fashion, polarized lenses are also available in a variety of shades and colors such as gray, green and brown. Polarized progressive bifocals from companies such as Signet Armorlite and Varilux (using Younger NuPolar technology), Specialty Lens and KBco have also expanded the lens choices available to the patient.

We offer polarized lenses to everyone interested in sunwear. We think it offers the best sun protection available.



TINTS AND MIRRORS

Color still counts for most patients, whether it brings enhanced optics and sun protection or not. As sunwear's role as a fashion accessory continues to grow, lens tints used for sun protection have become more disparate and unique. Patients interested in the fashion of sunwear have asked for a variety of color tints for their sunlenses. Some of the most popular tint shades include blue or purple for day wear or evening sun tints such as yellow or orange. Patients are also wearing yellow or orange tints on overcast days. It's for fashion reasons, not for vision. Tints can give sunglasses personality and patients like that.

Some patients are sacrificing their eyes for fashion, which haunts them in terms of protection when they buy "bright" tints on sunwear such as pink and yellow. There are also excellent tints for patients concerned about sun protection, however. For optimum sun protection, we usually recommend one of three tints to our patients: gray/green, natural gray or natural brown.

Brown is better in hazy sun conditions and grays are more natural, soothing colors. Grays reduce the light transmission without distorting the colors patients see. It depends on what the patient wants and what they plan to do with the lens.

Mirror coatings also offer patients protective as well as cosmetic benefits for sunwear. Mirrors, which are tremendously popular with skiers, come in a variety of colors. The most popular colors are gold, silver, and two distinct types - dielectric and metallized. Dielectric mirrors, which are recommended for wearers concerned about performance, are designed to reflect light using a vaporized titanium or quartz material that is heated and adhered to the surface of the lens in a vacuum chamber. Metallized mirrors, which are recommended more for fashion use because they are less durable, are intended to absorb light using materials such as chromium.

In the Southwest especially, mirror coatings seem to satisfy both fashion and optical considerations. They offer a tremendous amount of protection because they reflect a lot of the sunlight before it even reaches the eye.



A NEW PLAYER

A new, darker generation of photochromic lenses have presented us with another alternative in the sunlens category. Products such as Polar Active from Specialty Lens Corp. and Transhades from KBco. (polarized photochromics), Rodenstock SunLight, Seiko Changers and Transitions XTRActive, promise ultraviolet (UV) protection and light transmission (the percentage of light they allow through the lens) that rivals many of today's standard sun-lenses (although manufacturers do not position these photochromic products as sunlenses). While most of the standard photochromics to date have had light transmittance ranges of approximately 25 percent to 90 percent, many of these new "outdoor" photochromics have light transmittance ranges as low as 11 percent at full activation and as low as 40 percent indoors.

They have worked really well for patients who don't like clips and don't want to buy a second pair. They provide excellent sun protection; and as the technology gets better and better (allowing them to get darker faster) they are going to become a true sunlens alternative in the future. They're not there yet, but they're close.

Still, these products are not without concerns for potential sunlens purchasers. Like all plastic photochromic products, plastic lenses such as XTRActive, Changers and SunLight do not change behind the windshield of a car, making them impractical for sunlens patients who do a lot of driving. They are a great product, but not for driving.

It's like every other product out there. You have to know what the patient wants and what they need. Once you know that, there's a sunlens product out there for them.