

With a wide range of cosmetic and therapeutic applications, color contact lenses can add a new dimension to your practice. Here are tips from an expert in this modality.

By Mitch Cassel, O.D.

ARE YOU taking full advantage of color contact lenses?

More than a seasonal novelty, color lenses can be an important and rewarding practice-builder. Your patients

will gain therapeutic and emotional benefits when you're well-versed in the "what, how and when" of color lenses: What lenses are available? How can they be used? When should you choose one alternative over another?

Much of my practice involves the myriad uses of color contact lenses, from the routine to the unique. In this article, I'll share

Dr. Cassel has a contact lens practice in New York City, where he provides special-effect custom contact lenses to the motion picture, television and video industries. In addition, he owns an optical boutique in Rockefeller Center and is president of Custom Color Contacts, a leading prosthetic lens company in the eyecare industry.

some key strategies any practitioner can use to incorporate this interesting and valuable specialty into practice.

Color Choices and Styles

Today, patients can choose from numerous color contact lens options to enhance or feel more comfortable about their appearance. You'll find patients' requests can range from subtle natural color enhancement to dramatic changes. You and your patient can discuss the pros and cons of opaque vs. transparent, disposable vs. nondisposable and custom vs. standard color lenses, depending on the patients' needs or preferences. Choices include:

• Enhancer lenses. These overlap the natural eye color





The patient has a scarred, nonsighted leucocoric eye from traumatic eye injury (left) and the eye now has a hand-painted, soft laminated custom-designed contact lens (right). Matching the iris color and the pupil conceal the patient's disfigurement.

and include basic aqua, blue and green, along with custom colors.

• Custom enhancer lenses. Colors such as pink, orange, yel-

Special Eye Effects

Many actors enhance their performance with contact lenses that complement their makeup. Actors wear lenses not only to change their eye color, but also to create the look of aged, scarred, bloody, supernatural, disfigured and misdirected eyes. I do a great deal of this work in my practice, and you might find that this area may be of interest to you. Whether the lenses are plano or prescription, I always provide a general eye examination to professionally fit each patient. Like any other soft-lens fit, proper care and handling are also important.



The special effects contact lens on Liam Neeson's right eye (left) shows the aging effect of an arcus senilis as compared to his natural eye (right). The actor wore these lenses in the movie "Kinsey" (2004).



Justin Chatwin, who played Tom Cruise's son in "War of the Worlds" (2005), wears a special effects contact lens that mimics a subconjunctival hemorrhage.

Photo courtesy Mitchell Cassel

Photo courtesy Mitchell Cassel

These are some of the actors with whom I've worked to design custom contact lenses:

ACTOR MOVIE LENSES

Robert De Niro Frankenstein Horror eyes

Catherine Zeta-Jones Oceans Twelve Custom color changeTom Cruise Days of Thunder Subconjuctival hemor
Laura Linney Kinsey Color change

Billy Crystal Mr. Saturday Night
Tom Hanks Philadelphia
Quentin Tarantino Little Nicky
Julianne Moore The Hours

David Bowie
Leonardo DiCaprio
Leonardo DiCaprio
Little Wonder video
Basketball Diaries

LENSES
Horror eyes
Custom color change-laminated
Subconjuctival hemorrhage
Color change
Aged arcus senilis
AIDS-diseased look
Blind effect
Aged effects

Reptile supernatural Dilated pupils

Marketing Tips

- Know the products and have all trial lenses available.
- Be proactive. Ask all contact lens patients if they've ever considered wearing colored lenses.
- Use trial lenses only after an exam. Promote eye health.
- Eliminate excessive chair time by selecting only a few color choices. Charge for your services.
- Piggyback plano or novelty lenses over a patient's clear prescription to help him evaluate color.
- Always consider plano eyewear over contact lenses to reduce dryness and maximize protection.

low and purple provide subtle eye color changes, especially when used over a light- to medium-brown iris.

 Custom hand-painted lenses. These are preferred over standard disposable lenses when trying to closely match lighter irises. You can capture precise color tones with custom hand-painted contact lenses, including laminated soft lenses that provide depth and detail like a real eye.

Customizing color lenses may involve varying the intensity of the colors. For example, use a 10% light, visible-handling blue tint or a 30% intense, dark-brown tone for albinism.

Fitting Considerations

When fitting color lenses for therapeutic or cosmetic applications, be aware that certain measurements are integral to a successful outcome. These include measurements for iris diameters (standard 11.5 mm); adding a limbal ring (thick or thin), iris flecks or a corona (central spokes); varying pupil openings (average 4 mm), base curves, power (plus and minus power with limited astigmatism); and possibly fitting both eyes to match color.

To conceal a scarred eye secondary to a traumatic eye injury or congenital defect, for example, you can use a prosthetic soft contact lens custom hand-painted with natural iris flecks. Strabismic contact lens designs can help patients who have a misdirected, nonsighted eye and want to avoid muscle surgery. Using opaque, large, soft, scleral lens de-

signs, we can create the appearance of correct alignment for the nonsighted eye.

You should inform your patients at the start of the contact lens fitting that a perfect color match isn't possible because the eye is translucent, reflecting light that varies with lighting and clothing.

Therapeutic Applications

The therapeutic benefits of color contact lenses can range from low-vision use to sports applications. Be aware, however, that psychological and emotional issues may arise when dealing with prosthetic contact lenses. Traumatic eye injuries often have major psychological effects on patients, as do congenital eye defects, such as colobomas. It's important that patients have realistic expectations regarding color and vision.

Depending on a patient's condition, often we can enhance visual performance with therapeutic color contact lenses. But patients need to know, for example, the binocular effect that opaque contact lenses might present with dim illumination as the pupil dilates and encroaches upon the edge of the lens's pupil opening.

That said, even realistic expectations and results elicit a tremendous reaction. I find this to be the most rewarding part of my practice — making someone feel whole again.

Some common therapeutic applications of color contact lenses include:

Occluded lenses for multiple diagnoses: Black occluded lenses help eliminate diplopia secondary to trauma or systemic disease. We use opaque contact lens designs to create pupil openings, which help to eliminate photophobia (a common result of aniridia), iris coloboma, albinism or a keyhole irregular pupil secondary to surgical complications.

Tinted lenses for color deficiencies: We use various custom-tinted soft lenses to enhance color deficiencies. These





This patient has perforated corneas and blindness secondary to glaucoma (left). Cosmetic lenses alleviate the disease's emotional effects (right).





This patient has isotropia secondary to congenital defect (left) and the appearance is changed using a new misdirected strabismus hand-painted opaque lens with the iris realigned (right).

lenses can help patients discern colors and shapes, and often enhance reading skills, reduce glare and increase contrast sensitivity. X-Chrome contact lenses were first used with gas-permeable materials, but today we take a new approach using ChromaGEN for protan and deutan (red-green) color deficiencies.

Tinted lenses for sports applications: Tinted lenses can help improve the visual performance of many athletes. Green tints can help provide better contrast for tennis players for quicker response time in positioning and hitting a tennis ball. Yellow tints are used in baseball to reduce glare from overhead lighting and maximize contrast on cloudy days. Skiers can benefit from various blue and violet tinted lenses to help absorb light and glare from snow.

Fitting therapeutic contact lenses is basically no different from fitting other soft contact lenses. However, it's best to aim for maximum centration with minimal movement that doesn't compromise the cornea. Also, to maximize full coverage and reduce glare complications, it's important to order therapeutic tints larger than the pupil size.

Follow the Four "Be's"

If you're knowledgeable and experienced with contact lenses for cosmetic and therapeutic applications, then you probably already have a good idea of how to position color lenses in your practice. I offer the following additional advice, which I call the four "be's" of practice management for color lenses:

Be profitable. Start by being proactive and recommending color lenses to everyone. Next, learn how to maximize chair time when you fit color lenses. You must limit the time you spend with patients when they're selecting color. Listen intently to discern their needs, and then select a few lenses to start the process. Be sure to charge a fee for the demonstration, even if the patient doesn't buy the lenses.

Be flexible. Patients often buy color and clear lenses at the same visit. For patients who have a strong correction and can't view the color properly, it helps to demonstrate with a clear prescription lens and a piggybacked color lens.

Be up-to-date. You should be aware of all available products, as well as the lenses you keep in stock. Also, keep an inventory of plano lenses for quick consultation. You can choose among several companies for disposable enhancer and opaque contact lenses, which will provide either subtle natural enhancements or total iris-color changes.

Be a source for custom solutions. The results you can achieve with custom color lenses far outweigh those you can obtain from a disposable contact lens. However, there are other considerations:

- · Custom contact lenses take longer to receive.
- · Carefully select lenses that won't fade.
- · Reproducibility is important.
- · Expense may be an issue.

Nevertheless, the flexibility — particularly for therapeutic applications — is unmatched. With these lenses, you can customize iris diameters and color, color intensity, pupil openings, base curves, powers, iris flecks and coronas.





This patient has coloboma secondary to congenital defect (left). The appearance is corrected with a hand-painted, custom-designed lens (right).

Custom-colored laminated opaque soft hand-painted contact lenses can create the depth and detail of a real eye through enhancer colors and intensities. This natural look can make a major difference in the outcomes for some patients.

Comfort for Patients

Prescribing color contact lenses can be a very rewarding aspect of optometric practice, particularly when you are helping patients who are feeling the emotional effects of a disfigured eye. With the right positioning and management, you can make these lenses financially rewarding as well. I wish you the best in fulfilling this aspect of your practice. **nOD**