



A SURVEY OF OCULAR AESTHETIC TECHNOLOGIES



Multiple avenues exist to offer your patients both clinical and cosmetic benefits.

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Aesthetic treatments are becoming an increasingly integral part of eye care, bridging the gap between clinical and cosmetic improvements. With innovations in nonsurgical rejuvenation, optometrists have access to a range of technologies that enhance patient outcomes both medically and aesthetically.

This article explores key aesthetic technologies, their mechanisms of action and clinical benefits, and considerations for integrating them into your practice.

RADIO FREQUENCY

Radiofrequency (RF) uses controlled heat to stimulate collagen production, tighten skin, and improve periorbital rejuvenation. It is commonly used to enhance skin elasticity, reduce wrinkles, and support dry eye treatment by improving meibomian gland function.¹

While traditional RF procedures deliver energy to the skin's surface, combination RF/microneedling treatment uses thermal stimulation with the addition of micro-injuries to induce a stronger collagen response. RF/microneedling therapy is particularly beneficial for deeper

wrinkles and skin laxity, making it a compelling option for patients seeking enhanced results.

Note: Microneedling is not within the scope of optometric care but can potentially be performed in an optometric office by a licensed aesthetician. Check your state's guidelines before integrating this service into your practice offerings.

THERMOMECHANICAL TECHNOLOGY

Tixel i (Novoxel) is a thermomechanical device that differs from traditional RF by using direct heat transfer rather than electromagnetic energy. Its precision makes it ideal for treating delicate areas around the eyes, addressing both dry eye symptoms and aesthetic concerns, such as fine lines and skin laxity. One study showed improvements in corneal sensitivity, meibomian gland score, patient surveys, and tear breakup time after treatment with this technology.²

Other thermal technologies for managing dry eye and related issues include OCuSOFT Thermal 1-Touch (Ocusoft), LipiFlow Thermal Pulsation System (Johnson & Johnson Vision), MiBo Thermoflo (Mibo Medical Group), and the TearCare System (Sight Sciences).

PLASMA PEN FOR NONSURGICAL BLEPHAROPLASTY

Plasma pens use plasma energy to create controlled micro-injuries, stimulating collagen production and skin tightening. This technology is

particularly effective for nonsurgical blepharoplasties, offering patients a minimally invasive alternative to eyelid surgery. Results typically include improved lid lift, reduced wrinkles, and firmer skin, although patient selection and proper technique are critical to achieving optimal outcomes.

Note: Creating burns in the skin may lead to varying results, so practitioners should seek formal training and certification to ensure safe and effective outcomes. The learning curve involves mastering proper skin assessment, energy settings, and treatment protocols. Variability in healing and outcomes should be discussed with patients to set realistic expectations and obtain informed consent.

OTHER AESTHETIC TECHNOLOGIES Intense-Pulsed Light Therapy

This noninvasive procedure reduces inflammation and improves meibomian gland function while also treating facial redness and pigmentation.

Microcurrent Therapy

Low-intensity electrical currents are used in microcurrent therapy to stimulate facial muscles for the

purpose of enhancing circulation and lymphatic drainage, reducing puffiness, and improving skin tone. Microcurrent therapy is also being used in dry eye care for its ability to improve lid muscle tone, encouraging complete blinks that properly empty the glands and support ocular surface health. It has been suggested it can improve visual measures in patients with dry age-related macular degeneration.³

Neuromodulators

Injectable neurotoxins such as onabotulinumtoxinA (Botox, Allergan), abobotulinumtoxinA (Dysport, Ipsen), or incobotulinumtoxinA (Xeomin, Merz Pharmaceuticals) can effectively smooth dynamic wrinkles and fine lines around the eyes and may aid in the treatment of blepharospasm.

Note: These injectables are not within the scope of optometry and require staffing by or referral to a licensed medical professional, such as a nurse injector, physician, or aesthetician, depending on state law.

Dermal fillers

Periocular hyaluronic acid dermal fillers, such as Juvaderm (AbbVie),

restore volume to the tear troughs and periorbital areas, addressing age-related volume loss.

Note: As with neuromodulators, these treatments fall outside the scope of optometry in most states and may require collaboration with or referral to qualified aesthetic providers.

EXPAND YOUR DEFINITION OF CARE

Integrating aesthetic technologies requires training, compliance with state regulations, and strategic pricing to ensure profitability. Many practices find that offering these services not only enhances patient satisfaction, but also creates a valuable revenue stream. Keep in mind that each state has its own set of regulations, which optometrists who are looking to offer ocular aesthetics must understand and comply with. Another item that shouldn't be overlooked is malpractice insurance. Ensure that your policy covers any potential risks associated with ocular aesthetics services.

By understanding the differences between therapeutic offerings such as RF, RF/microneedling, thermomechanical options, and plasma pen treatments, practitioners can make informed decisions about which technologies best suit their patient demographics and practice goals. ■

AT A GLANCE

- Incorporating aesthetic services in an optometric practice can enhance patient outcomes clinically and cosmetically.
- Radio frequency can support patients undergoing treatments for dry eye, as it enhances skin elasticity, reduces wrinkles, and improves meibomian gland function.
- Plasma pens can serve as a minimally invasive alternative to a blepharoplasty, and treatment with a thermomechanical device may improve corneal sensitivity, meibomian gland score, patient surveys, and tear breakup time.
- Every state has its own set of rules and regulations pertaining to ocular aesthetics, so it's important to understand and comply with them.

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