

OCULAR SURGERY NEWS®

Technique offers individualized approach for vision correction

BY ARUN C. GULANI, MD, MS

What if you could provide a custom-designed vision correction surgical option to each and every patient (because everyone is a candidate), consistently deliver that best vision (in many cases beyond 20/20), not fear complex cases and have the confidence to correct any complication back to 20/20?

More than two decades ago, I introduced Corneoplastique as a contemporary super specialty that includes the full spectrum of kerato-lenticulo-refractive surgeries to make vision the accountable endpoint of all eye surgery by intelligently manipulating the optical interplay of all

the ocular components in a single or staged process using the cornea as a vision rehabilitative platform.

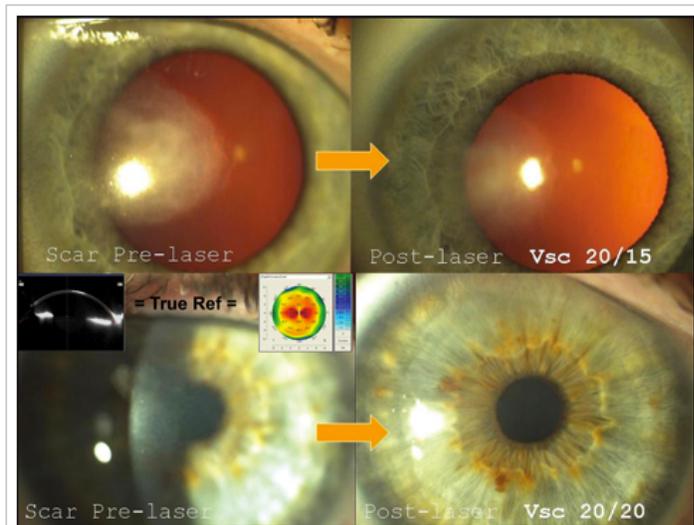


Figure 1. Corneal scar removal by refractive surgical method in Corneoplastique.

Images: Gulani AC

Thus, 48 vision corrective procedures, including all kinds of laser vision surgeries (LASIK, PRK, LASEK, ReLEx SMILE), premium cataract surgery (toric, accommodating, pseudoaccommodating, extended depth of focus, adjustable optics, dual optics, trifocal), phakic implants, corneal implants and inlays, including all lens/corneal/anterior chamber reparative and preparative surgeries and staged combinations using all of these with unlimited permutations, to individualize vision outcomes for each and every patient.

This spectrum of surgical offerings ranges from the ocular surface to intraocular and anterior chamber manipulations, thus blurring the line among corneal, refractive and cataract surgeons by turning every eye surgeon into a “vision corrective surgeon.”

Subsections in Corneoplastique

Among a few of the subsections under this specialty are:

LASIK and premium cataract surgery to vision beyond 20/20;

Turning non-candidates to candidates in refractive surgery;

Keratoconus as refractive surgery — think outside the CONE;

Corneal scars as refractive surgery (Figure 1) — straight to 20/20;

Pterygium (Figure 2) and ocular surface surgery to cosmetic outcomes;

Reversing previous refractive surgeries to 20/20;

Correcting kerato-lenticulo-refractive complications (Figure 3) to 20/20; and

Unlimited combination surgeries for nightmare cases (Figure 4) to 20/20.

The key thought process of this super specialty is the 5S classification system, which like a “mental coin sorter” allows possibly every ocular case to be seamlessly incorporated into a diagnostic and custom-planning mode. Additionally, the base requirement of all Corneoplastique procedures is that they have the following five criteria: topical, brief, aesthetic pleasing, visually promising and least interventional. So, in my mind, any surgery I choose for the patient must have all five of these criteria fulfilled.

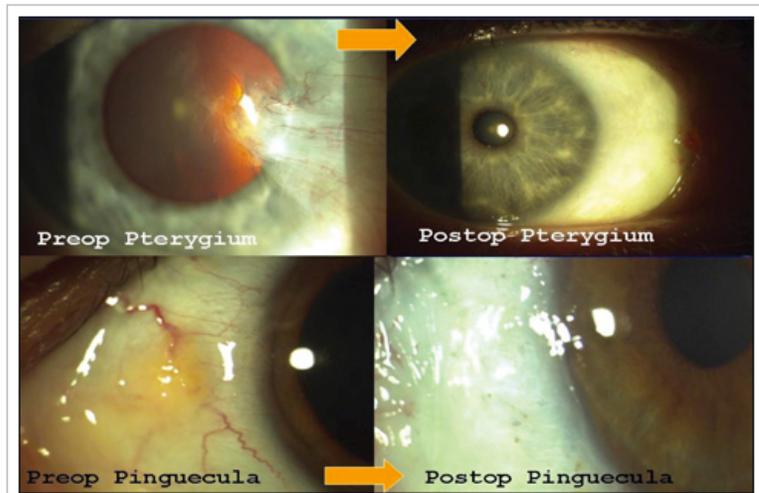


Figure 2. Pterygium and pinguecula excision by Corneoplastique.

Armed with these concepts along with proficiency in the full spectrum of surgery techniques and technologies, one can approach virgin eyes along with complex situations and even complications including previous surgeries and take them to emmetropic vision outcomes.

As long as there is no vision-limiting intraocular pathology or ongoing disease such as retinal, neurological or glaucoma issues, there is no reason why we cannot aim for a perfect visual outcome in every case. Thus, safety and elegant outcomes along with pleasant and memorable patient experiences become a welcome side effect of this vision-oriented surgical specialty.

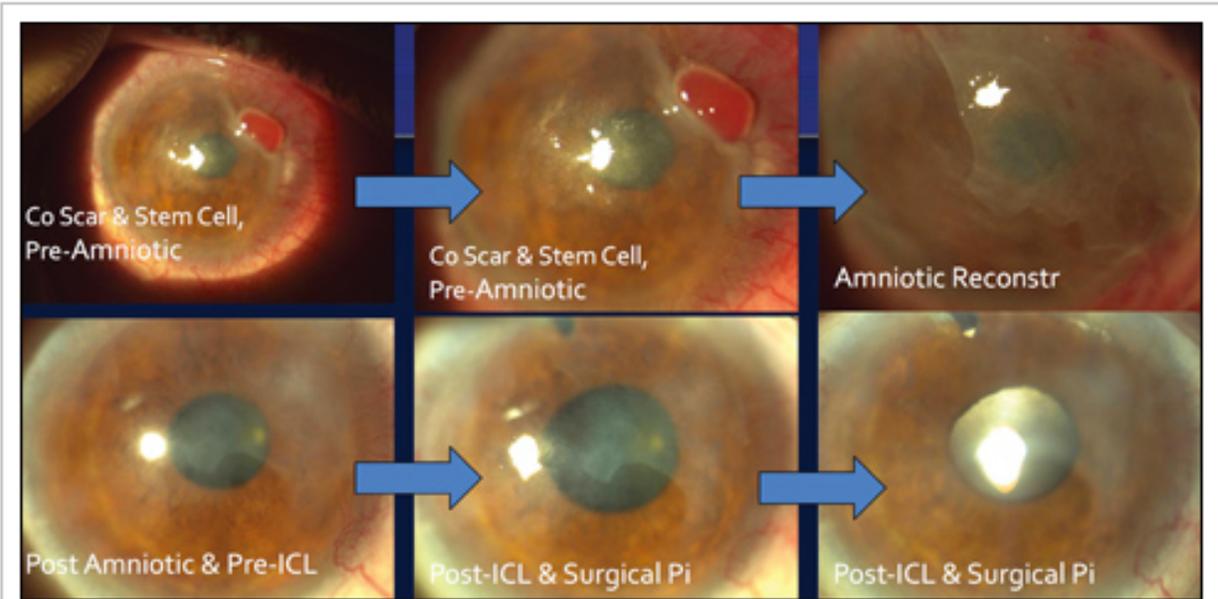


Figure 3. Corneoplastique in the management of complicated corneal and lenticular condition.

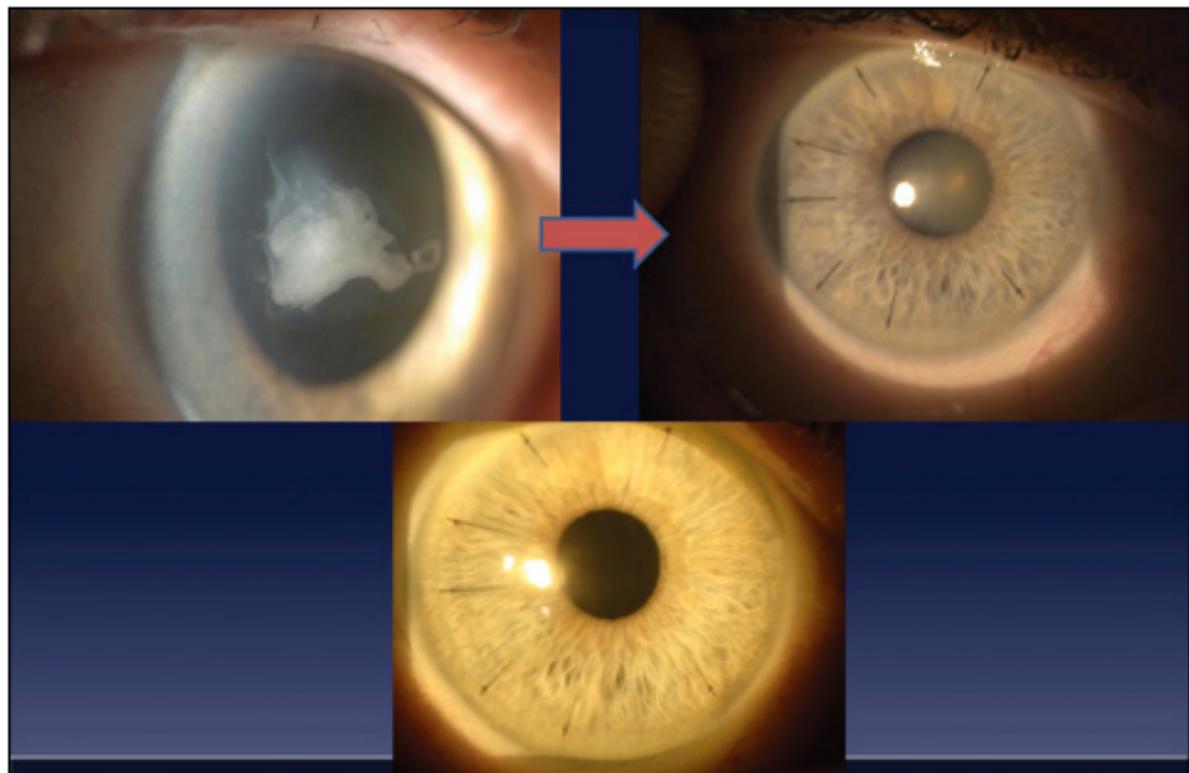


Figure 4. Management of post-LASIK epithelial ingrowth followed by cataract surgery for visual rehabilitation.

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