

prescribing for astigmatism

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Hybrids for Regular Astigmats

The SynergEyes family of hybrid lens designs has been a welcome addition to the specialty lens practice, especially for correcting irregular astigmatism. But don't limit this modality to specialty

patients. Consider the same benefits for astigmatic patients who desire contact lens correction, especially when soft toric lenses don't meet expectations or for GP non-adapters.

A Perfect Example

Patient AL is a healthy, active 15-year-old who plays basketball and is looking forward to the academic challenges of high school. Her refractive error is primarily astigmatic. After trying several soft toric designs along with appropriate parameter refinement, she was frustrated with visual acuity and wasn't satisfied with comfort. Her manifest refraction is -0.25 -2.00 x30 OD and pl -1.75 x140 OS.

Topographical maps indicate symmetrical oblique astigmatism limbus-to-limbus (Figure 1).

We ultimately prescribed SynergEyes lenses in the A design. For all indications, the overall base curve-to-cornea fitting goal is apical clearance with a skirt radius that provides centration,

0.10mm to 0.20mm of movement post-blink and no edge stand-off (fluting). An excellent starting base curve is approximately 1.25D steeper than flat K. This sagittal depth and apical clearance prevents lens tightening. Typically, try the flatter soft skirt radius first and steepen if the lens de-centers or the edge is not in close apposition to the conjunctiva around all 360 degrees.

In this case AL's simulated keratometric values are:

43.00@30 /
45.00@120.

The perfect fitting relationship as shown in Figure 2 is with a base curve of 7.60mm (44.37D) and a skirt radius of 8.9mm. She successfully wears lenses in both eyes 14

hours a day and achieves a consistent 20/15 visual acuity.

Handling and Care

Application is easiest by using both the index and middle finger of the dominant hand. These two fingers are brought together and the lens balanced between them

while the ring finger is used to pull down the lower lid. For removal, instruct the patient to look up, manually push up on the bottom of the lens slightly and then pinch at the edges of the soft skirt at about the 4 o'clock and 8 o'clock positions.

Patients must use soft lens solutions for all lens care steps. GP solutions are not compatible with

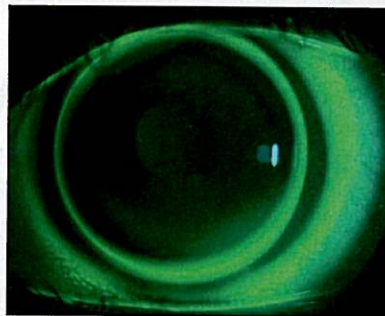


Figure 2. SynergEyes A Design (B.C. = 1.375D Steeper than K).

the soft skirt. SynergEyes, Inc. currently recommends Opti-Free Replenish (Alcon).

Clear Benefits

The optics of the hybrid lens perform as a spherical GP lens, so they're ideal for patients who manifest equal amounts of refractive cylinder as corneal cylinder. We're still awaiting a toric design to address the needs of patients with significant residual astigmatism in a GP lens. In the meantime, enjoy freedom from LARS and cross-cylinder calculations and consider this new option for regular astigmats. **CLS**

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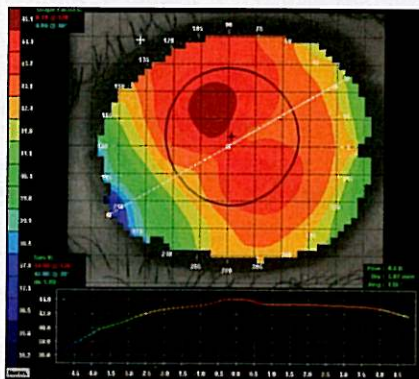


Figure 1. Topography of a 2.00D corneal astigmat.