

All Clear!

Creating Clearance on the Cornea and Clear Vision in a Post-Keratoplasty Patient

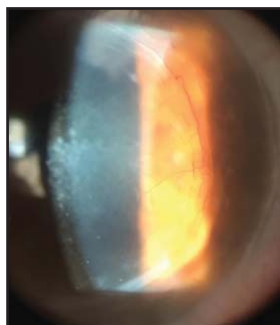
by Stephanie L. Woo OD FAAO FSLs

A 64-year-old white female was referred for a contact lens consult from her primary care optometrist. The patient had a history of bilateral corneal transplants about 15 years prior due to keratoconus OD and OS. Her BCVA with spectacles OS is 20/400.

She was fit into a hybrid lens OS 4 years prior, but the left eye showed beginning signs of neovascularization (Fig 1), and she was referred for a second opinion and possible refit. The right eye did not require a contact lens, as she can see relatively well with glasses.

Figure 1:

*Neovascularization
in a post-graft patient*



Her current vision with spectacles for OD was 20/30- and OS through the hybrid lens was 20/30-. The hybrid lens exhibited bearing around 3:00 and 9:00.

After reviewing the different lens options with the patient, she opted to try a scleral lens. A mini-scleral lens was fit to her left eye.

Final lens parameters were:

Art Optical Ampleye

4100 Sag/8.04 BC/16.50 Dia/-5.00 Pwr

Material: Contamac Optimum Extreme

Upon dispense, the patient obtained 20/25 vision through her new scleral lens. She excelled with insertion and removal training. The fit of the scleral lens exhibited about 270 μ m of central clearance with full limbal clearance and edge alignment (Fig 2).

Figure 2:

*Final scleral lens fit, exhibiting
about 270 μ m of central
clearance with full limbal
clearance and edge
alignment.*



Closing Remarks

The benefits of the scleral lens include: the cornea stays clear (as opposed to the bearing with the hybrid lenses), further neovascularization development is suspected to stop (and potentially reverse, resulting in clearing of the blood vessels) with good comfort and visual acuity (providing clear vision to the patient). All clear!

Dr. Stephanie L. Woo graduated from the Southern California College of Optometry and completed a Cornea/Contact Lens residency at the University of Missouri - St. Louis. She is a Fellow of the American Academy of Optometry and a Fellow of the Scleral Lens Education Society. She is a contributing author for the American Optometric Association Contact Lens and Cornea section, and she is the author of the "GP Expert" column for Review of Contact Lenses. She is also the Public Education Chair for the Scleral Lens Education society and is an Advisory Board member for GPLI. She currently practices at Havasu Eye Center in Lake Havasu, AZ.

