

# Young 28 Year Old Female With Count Finger Vision Corrected to 20/25 After 7 Years

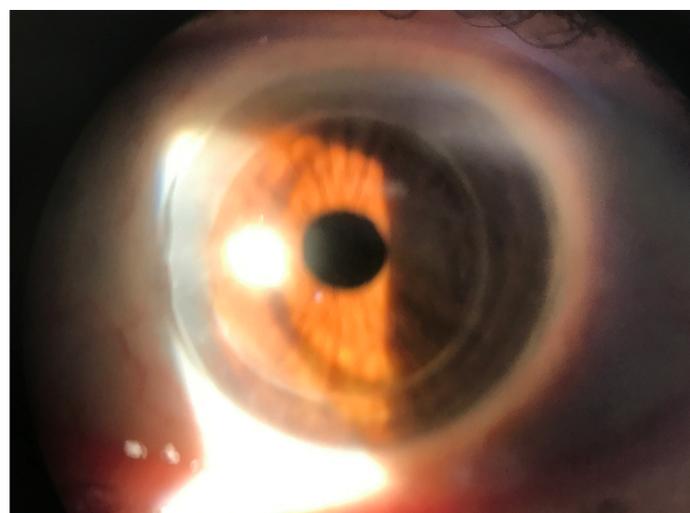
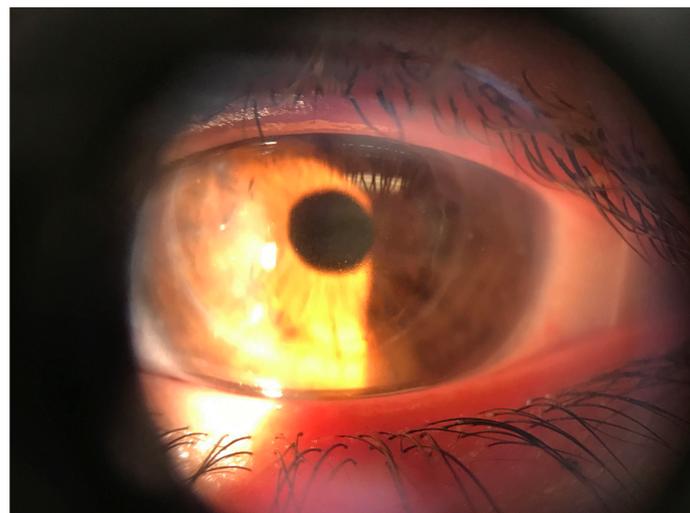
Author: Stephanie Woo, OD, FAAO, FSLS

**Background:** A 28 year old Hispanic female patient presented to the clinic for a consult for possible contact lens fitting. She had a history of herpes simplex keratitis when she was 20 years old.

Due to the dense, central scar tissue, a penetrating keratoplasty was performed at the age of 21. Complications from the surgery led to necessary cataract removal with a posterior chamber intraocular lens.

From that point on, she routinely followed up with her corneal surgeon, who never mentioned any vision correction options, such as a specialty lens.

She was referred to a glaucoma specialist for a routine baseline workup, who then referred her to Dr. Woo for a potential contact lens fit.



**Case Report:** Patient presented with 20/20 visual acuity of the OD and 20/count fingers on the OS. Manifest refraction did not improve vision for either eye. The anterior and posterior structures of the OD were within normal limits. The OS showed a clear graft, well centered, and slight neovascularization inferior temporal. Intraocular lens was clear and centered. Posterior segment was within normal limits.

## **Lens Fitting:**

Patient was fit with the SynergEyes VS™ scleral lens for the OS:

## **Diagnostic Lens:**

SynergEyes VS™ / 8.4 / 16.0/ 36-42/ 4000 sag  
SCOR was +10.50-2.75x106 (VA was 20/25)  
Hash marks were at 11 and 5  
Edges were perfectly aligned 360

Lenses were ordered via email through a SynergEyes consultant. The position of the hash marks along with the over-refraction is all that is necessary to determine the final lens power. Alternatively, a formula can be used if the practitioner desires to design the lens themselves.

## **Lens Ordered:**

SynergEyes VS™ / 36-42 edge / 4000 sag / +12.00-2.75 x 166/ Menicon Z

Upon dispense, patient could see 20/25 through the lens and reported excellent comfort. Lens fit remain unchanged with about 200 µm of central clearance, full limbal clearance and great edge alignment. Patient was instructed on insertion and removal.

**Follow Up:** Patient was seen for a 1 week follow up and was thrilled that her vision was improved drastically. She claimed her vision was amazing, depth perception improved, and comfort was excellent. Vision remained at 20/25 with no significant SCOR. Lens fit remain unchanged. After 4 months of wear, her eye remains healthy with great vision.



**Conclusion:** Cornea transplant patients should be evaluated for a specialty contact lens to possibly improve their vision. Corneal transplants often yield highly irregular astigmatism and corneal elevation variability. Specialty contact lenses such as corneal gas permeable lenses, custom soft lenses, hybrid lenses, and scleral lenses should be lenses of consideration. Improving a patient's vision, depth perception, and quality of life is an important aspect of our career.