CASE STUDY

USING 16MM BOSTONSIGHT SCLERAL LENSES TO IMPROVE VISION IN A HIGHLY IRREGULAR CORNEA

BACKGROUND

A 45-year-old white female, originally from Venezuela, along with her husband and her son, immigrated to the U.S. a few years ago and were scheduled to have their U.S. citizenship interview in September 2021. She had been a soft contact lens wearer since she was 12. When she was 20, she was diagnosed with keratoconus and began wearing GP lenses. When she moved to the U.S. she was re-fit with hybrid lenses.

She began to experience reduced vision and was told that the hybrid lenses were causing neovascularization to both corneas. She had to discontinue use. She was unable to drive, work, read, or continue her English classes. She was referred to Dr. Chawan by Joann Simonsen, co-founder and Vice President (retired) of Euclid Systems Corporation, who was teaching the patient’s English language class.

The below topography scans show her highly irregular cornea.

Dr. Chandrashekhar Chawan has a PhD in physics and optometric sciences and a degree in optometry. While working at Bombay Hospital as Chief Optometrist and Contact Lens Specialist he completed a course in sculpture and modeling at Sir J. J. School of Arts, Mumbai. In 1996 he underwent training in ocular prosthesis at Moorfield’s Eye Hospital in London. In 1999, he developed the world’s first Soft Hydrogel Ocular Prosthesis. In 2003, he was the first Johnson & Johnson Gift of Sight International Fellow. In 2009, he invented a technique for painting RGP scleral lenses.
SCLERAL LENS FITTINGS

Dr. Chawan fitted the patient with the newly launched 16mm BostonSight SCLERAL lenses using the diagnostic FitKit®. Despite her central corneal scar and the blood vessels on her keratoconic cornea, Dr. Chawan improved her vision to 20/25 and 20/20 with BostonSight SCLERAL lenses.

RESULTS

The patient is ready to sit for her citizenship interview in September. She returned to her English class and has started a new job. She describes the lenses as life-changing for her and her family.