

Utilizing Scleral Lenses for Normal Patients

Submitted by: Raymond Chartier, OD

Sight is the greatest sense humans possess. It allows us to not only efficiently interact with our world but to experience our world free of worry. However, not all of us are blessed with eyesight that allows us these luxuries. Some people have pathological corneal conditions affecting their sight that cannot be corrected with standard glasses or contacts. Yet, with a simple scleral lens, these patients can achieve acuities sometimes better than the average population. This life-changing visual transformation is what led me to do a contact lens residency. Giving the blind sight is an opportunity that not many people get to experience, yet during my residency I have had the joy of experiencing that feeling on almost a daily basis. Scleral lenses, however, can be used for much more than corneal disease. The comfort and stability of vision that scleral lenses provide can also be applied to many more patients.

Outside of corneal pathology there exist patients that although may not have a corneal disease have decreased or unstable vision for reasons considered normal. A patient may have a high amount of corneal cylinder and may have issues with stable vision in typical soft lenses or not be able to adapt to a corneal GP. Other patients may have issues tolerating the comfort of soft lenses or have ocular dryness that plagues them on a daily basis. Whatever the reason, scleral lens can be considered for these patients given not only the stability of vision they can achieve but also the comfort scleral lenses provide.

I recently fit Ampleye scleral lenses on a patient who had a combination of these issues. He had been unsuccessful with the comfort of basic soft lenses and was looking to acquire more stable vision. He has had longstanding degenerative myopia with a spectacle Rx of -11.25 -1.50 x 155 OD and -12.50 -1.00 x 180 OS. Over the years, he has been fit in a multitude of soft lenses that he was not able to wear for more than a few hours. For this reason, he had elected to stay in his glasses which although provided 20/20 acuity, did not allow him the stability of vision he wanted. After completing the fit in Ampleye, he reported being able to wear the lenses for close to a full day without any issues outside of normal adaptation to lenses. The resulting acuity was 20/20 OU without visual fluctuations. Even though simple, this case shows the ability of scleral lenses to be implemented in more standard situations and not just for corneal disease or irregularity.

Although scleral lenses are not new technology, their popularity in recent years has vastly grown. Although typically used for medical purposes, sclerals can be implemented into standard care practices for the normal patient. In the end, it all comes down to what is best for the patient. The majority of patients will find success in normal contact lens modalities (soft, toric soft, spherical GP's). However, scleral lenses can be considered for these normal patients that are unsuccessful in the typical modalities. It is our duty as professionals to consider all options for our patients so we can provide them with the best vision possible so they can experience the world we live in worry free.