The Option of Scleral Lenses

Scleral lenses are rigid gas-permeable lenses that are large in diameter. Unlike a typical RGP contact lens, scleral lenses fully cover the cornea and rest on the sclera, the white part of the eye.

One thing that is unique about scleral lenses is that they hold a reservoir of fluid behind the scleral lens, protecting the cornea and keeping the front of the eye moist.

There are many benefits to wearing scleral lenses. First, they have the same advantages as conventional GP lenses compared to soft contact lenses. This includes sharper vision, better durability, and less risk of complications. In addition, scleral lenses are more stable and secure than typical GP lenses and are less likely to dislodge from the eye. They also provide comfort similar to that of soft contact lenses.

![Fitting the Scleral Contact Lens](http://www.mayoclinic.org/medicalprofs/enlargeimage6039.html)

So who is a good candidate for scleral lenses? Patients with irregular corneas can benefit greatly from this lens option. Conditions, such as a keratoconus, cause irregularities on the surface of the eye and so vision cannot be as easily corrected with a simple pair of glasses or with soft contact lenses. Scleral lenses provide a smooth front surface so light can pass through, while also effectively covering any irregularities of the cornea. They also provide sharper vision. Patients with eye conditions affecting their tear film can also benefit from scleral lenses. Dry eye syndrome, for example, is a common condition warranting the use of scleral lenses. The fluid that the scleral lens holds allows for more comfort and moisture than the typical contact lens.

![Figure 2. The fluid trapped behind the lens allows for increased comfort and moisture in the eye.](http://news.vanderbilt.edu/2012/10/special-lenses-help-restore-physicians-fading-vision/)

Lastly, patients with refractive errors such as nearsightedness and farsightedness (and who are unable to wear other types of lenses) may find this to be a good alternative. The larger diameter of scleral lenses typically makes it more comfortable.

Sources:
1. [http://www.contactlenses.org/scleral.htm](http://www.contactlenses.org/scleral.htm)
2. [https://www.sclerallens.org/about](https://www.sclerallens.org/about)