Case Report Series

Dr. Runyon completed his Bachelor of Science degree at Ferris State University and earned his Doctorate of Optometry from Illinois College of Optometry in Chicago. He has practiced optometry since 1996, and has been with South Michigan Ophthalmology in Marshall, Michigan, since 2005. Dr. Runyon specializes in contact lens fitting.

Mission Accomplished:
Ampleye gives Iraq Veteran with Keratoconus new view & new lease on life
by Brad Runyon, OD & Brooke Edwards, Fitting Consultant

Introduction
JW is a 32 year old patient with bilateral keratoconus. He has had a corneal transplant in the OS.

OD Manifest: -8.75 DS (20/100)
OS Manifest: +2.25+1.00x090 (20/70)

History
We first fit this patient in February 2015 using ACE (Art Custom Eccentric) for the OD and Boston Envision for the OS. He was only able to achieve 20/100 OD and 20/50 OS with the following parameters:

**OD/ACE Design:**
- 6.36 BC
- 9.0mm Dia
- -15.00 Pwr
- 8.0 OZ
- .50 ECC
- .11 Edge Lift

**OS/Boston Envision Design:**
- 8.15 BC
- 9.6mm Dia
- -1.75 Pwr

The patient had been active in the Iraq War but was unfortunately discharged due to difficulties associated with his advancing Keratoconus. Seeking to improve his quality of life, Dr. Runyon chose to refit the patient into the Ampleye mini-scleral. At the initial fitting, the doctor trialed the 4400 SAG OD and 4000 SAG OS. Both lenses displayed approximately 275um of clearance after 20 min. He reported no limbal touch or scleral impingement so we used the standard toric haptic with no alteration to the PCZ, LLZ or SLZ. The patient had spherical over-refractions of +3.00 OD and plano OS.

**Final Ampleye Parameters**

<table>
<thead>
<tr>
<th></th>
<th>Base Curve</th>
<th>SAG</th>
<th>Power</th>
<th>Diameter</th>
<th>PCZ</th>
<th>LLZ</th>
<th>SLZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>OD</td>
<td>8.04</td>
<td>4400</td>
<td>-1.00</td>
<td>16.5</td>
<td>Std</td>
<td>Std</td>
<td>Std</td>
</tr>
<tr>
<td>OS</td>
<td>8.44</td>
<td>4000</td>
<td>Plano</td>
<td>16.5</td>
<td>Std</td>
<td>Std</td>
<td>Std</td>
</tr>
</tbody>
</table>

**Conclusion**
Based on a single diagnostic fitting in Ampleye, the patient was able to achieve visual acuities of 20/30 OD and 20/25 OS (20/25 OU) with over-refraction. Dr. Runyon said the patient asked to take the trial lenses home!

At dispense, the lenses continued to display optimal central vault and the visual acuity remained stable. The patient was ecstatic and claimed Ampleye was the best fitting lens he has ever worn. It seems safe to say that Dr. Runyon succeeded in his mission to change this patient’s life for the better.