

# Use of a SiHi lens in a High Powered Hyperopic Astigmatic Patient

David L. Kading, OD, FAAO, FCLSA  
Specialty Eyecare Group, Seattle, WA USA

## INTRODUCTION

When fitting soft lenses on patients, it is often a one size fits all. However when patients have large or small diameter corneas, steep or flat base curves, high sphere or cylinder powers it necessitates lenses that are not standard. Traditionally patients have been limited in the options available to them, especially in the context of the contact lens material. Recently the only custom Silicone Hydrogel material, Efofilcon A (Definitive) from Contamac (Essex Uk), was approved for use in the United States.

## PERTINENT DATA

Efofilcon A is limited to a couple of lens designs within the United States. One such design is from Art Optical Contact Lens, Inc. (Grand Rapids, MI). The Intelliwave lens design, introduced in 2008, is available with made-to-order Base Curve, Diameter, Sphere, Cylinder, Axis, and Add (multifocal/multifocal toric designs).

## CASE INTRODUCTION

MF, a 35 year-old male was referred to our Specialty Contact Lens Service for custom contact lens fitting. He had attempted to wear various types of lenses in the past but was unsuccessful. His systemic health was unremarkable. His ocular health was unremarkable. MF reported that he did not have any interest in Rigid Gas Permeable (RGP) lenses as he has not had success with them in the past and did not like the comfort.

## CASE DETAILS

Spectacle RX    OD: +10.00-6.00X023  
                         OS: +8.00-5.75X165  
Keratometry    OD: 39.00@026/43.6@116  
                         OS: 38.9@168/44.1@078  
DVID            OD: 11.00mm OD  
                         OS: 11.00mm OS

## RESULTS

Following Vertexing and Over-Refraction, the patient's final lens parameters were:  
OD: +12.25-6.25X026/8.60/14.00.  
OS: +9.00-5.25X165/9.10/14.00  
MF is happy with his vision and is pleased with the comfort of the custom Silicone Hydrogel lens.

## CONCLUSIONS

When patients have large or small diameter corneas, steep or flat base curves, high sphere or cylinder powers, it is pertinent for them to be in custom contact lenses. Oxygen permeability is critical when patients have high powered lenses and the utilization of silicone hydrogel materials in these patients is paramount.

