

# MAXIM3D<sup>TM</sup>

FREEDOM IN DESIGN

## CASE REPORT

### DRY EYE PATIENT - CSP SCAN - ONE AND DONE

WRITTEN BY  
CAROLINA PEDROLETTI, OD

L.C. a 71-year-old Caucasian female Retired Attorney

- Referred for a scleral lens fitting by a corneal specialist to improve the ocular surface and visual acuity

#### Ocular history

- Severe dry eyes
  - Glaucoma
  - Unable to tolerate all contact lenses previously due to poor vision and comfort
- History of various types of contact lens wear for more than 50 years  
Most recently wore soft toric monthly replacement contact lenses

#### Ocular medications

- used Soothe XP artificial tears 4-5 times a day prior to scleral lens wear
- cyclosporine 0.05% bid OU
- latanoprost ophthalmic emulsion 0.005% qhs OU

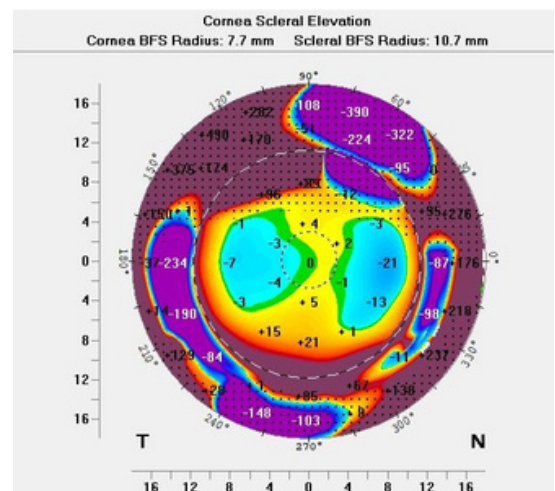
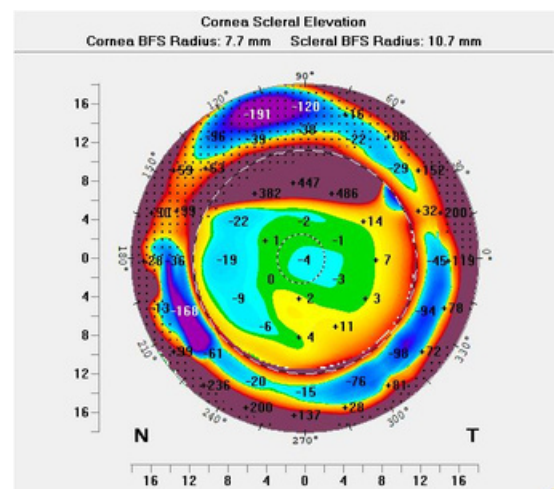
#### Discussed the option of custom scleral lenses

- Goal to improve vision and comfort with scleral lenses

#### Entering vision with spectacle correction

OD 20/25

OS 20/25



OD AND OS CSP MAP

BCVA with refraction  
OD -6.00-1.75x086 20/25  
OS -7.00-0.75x098 20/20

Slit lamp  
3+ diffuse SPK OU

(insert image of corneal topography or tomography)

Sim Ks  
OD 42.90 / 44.20  
OS 43.00 / 43.30

HVID (Pentacam)  
OD 11.5 mm  
OS 11.6 mm

Pachymetry  
OD 612um  
OS 616um

Cornea – 3+ diffuse PEK OU

Pentacam CSP performed  
(insert image if possible)

Diagnostic lenses were selected based off of CSP data  
Note larger diagnostic lenses were selected due to severe  
OSD

Maxim  
OD 7.67 / -3.00 / 16.4  
Sag 5.00

SOR -4.25 20/25

Maxim  
OS 7.85 / -2.00 / 16.4  
Sag 4.82  
SOR -5.75 20/20

## Maxim 3D lenses were designed based off of CSP data

Initial lenses  
Maxim3D Optimum Extra with Tangible Hydra-PEG  
OD 7.67 / 16.1 / -7.00  
Sag 4.94

Maxim Optimum Extra with Tangible Hydra-PEG  
OS 7.67 / 16.1 / -8.37  
Sag 4.67

VA  
OD 20/20 SOR pl  
OS 20/20 SOR pl

Fit  
Ideal central clearance, ideal limbal clearance, even  
landing OU

Return visit two weeks later after wearing lenses for 8  
hours

WTT 8 hours  
Solutions  
AddiPak – USING ADDIPAK TO INSERT SCLERALS

VA  
OD 20/25+2 SOR -0.25 20/20  
OS 20/20 SOR pl

Fit  
Ideal central clearance, ideal limbal clearance, even  
landing OU  
Excellent comfort  
Eyes are more moist and not as dry  
Less ocular injection

Lenses removed

Cornea – no SPK OU

No changes or remakes needed.

Maxim Optimum Extra with Tangible Hydra-PEG

OD 7.67 / -7.25 / 16.1

Sag 4.94

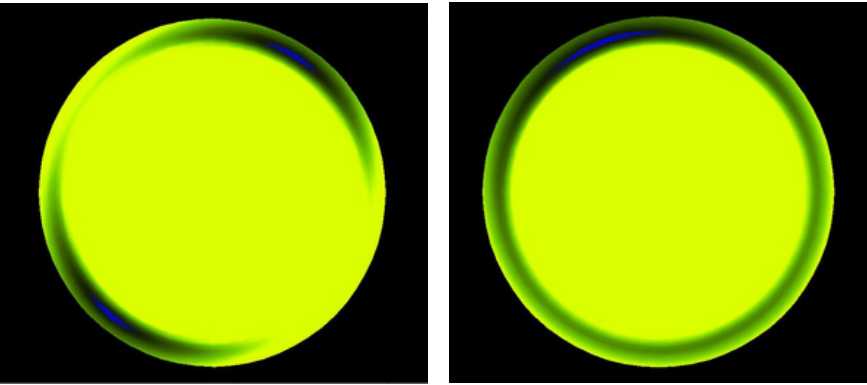
OS 7.67 / -8.37 / 16.1

Sag 4.67

VA

OD 20/20

OS 20/20

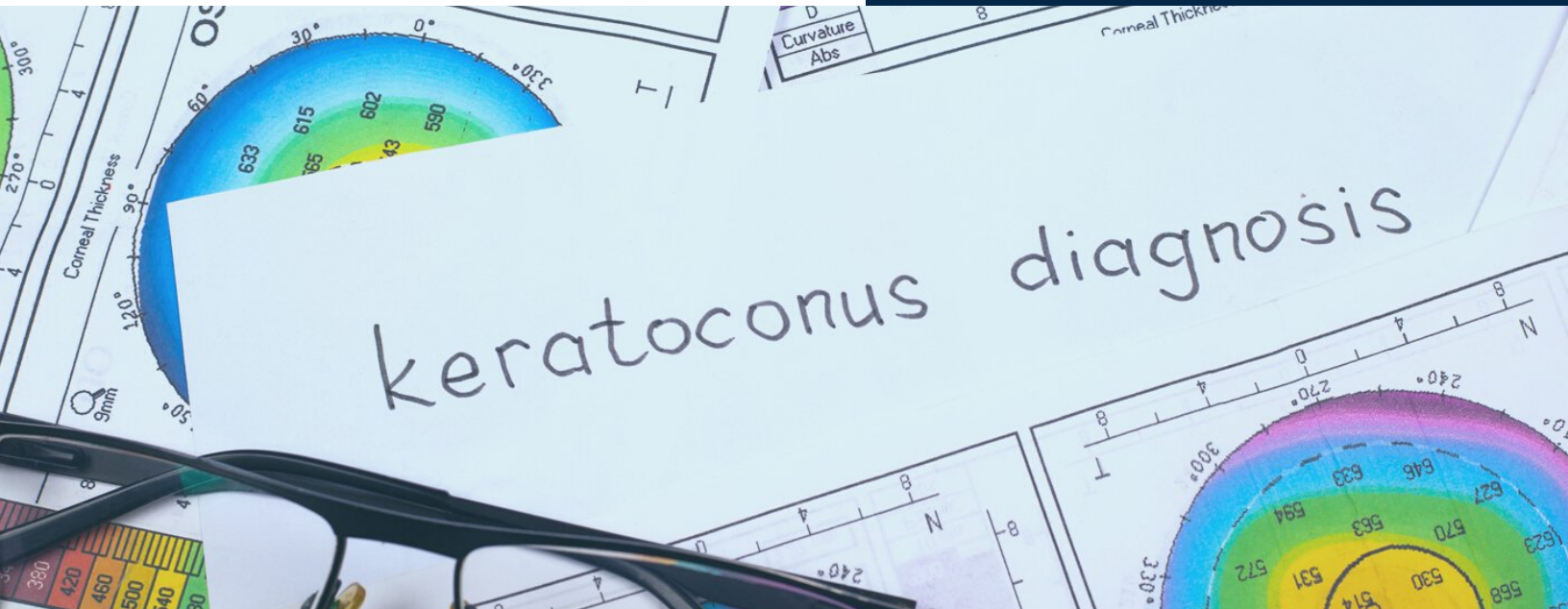


OD AND OS LENS DESIGNS

# CONCUSION

## Clinical Pearls

- Custom scleral lenses not only improve the ocular surface in severe dry eye, excellent vision can be obtained as well
- Significantly reduced reliance on artificial tears
- Improved efficiency with CSP scleral profilometry
- L.C. reported a significant improvement in quality of life and is able to wear lenses comfortably for 12 hours per day



*"Maxim 3D quote here."*