

### Purpose of Rehabilitation Optometry

- Quality of vision and quality of life are closely connected.
- Purpose is to restore as much visual functioning as possible.
- While avoiding long-term compromise of ocular health.
- Refractive surgery produces many thousands of patients who need specialty contact lenses every year.

### Scope of Rehabilitation Optometry

#### ...includes acts of Nature



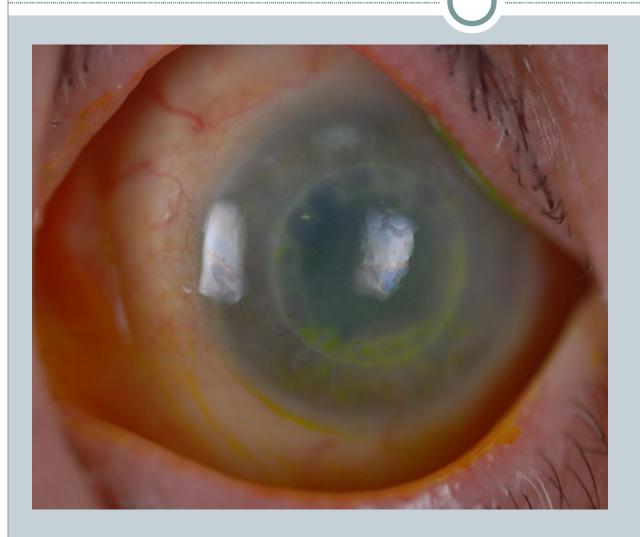
Stevens-Johnson Syndrome With Scleral Lens

...and aberrations of human design.



Scleral Lens over post-LASIK Ectasia with Intacs.

#### Rehabilitation Optometry can Prevent the need for Some Transplants



# Rejected Corneal Graft



#### A Partial List of Post-Lasik Problems

- Reduced best-corrected visual acuity
- Irregular or distorted corneas
- Open wounds and/or weakened corneal flap
- Higher order aberrations
- Decentered optical zones
- Corneal ectasia
- Extremely dry eye
- Ocular pain and headaches
- Vitreous floaters
- Reduced contrast sensitivity
- Dramatically reduced night vision
- Visual phenomena such as glare, flare, halos around lights, starbursts
- Overcorrection of the pre-surgical refractive error
- Emotional issues due to many of the above factors



#### Special Mission of Optometry for RS Patients: Contact Lenses Save Lives

- Patients who experience LASIK complications may experience depression and suicidal thoughts.
- A number of patients have told me they have considered suicide because of LASIK complications.
- Several patients who had suicidal thoughts are grateful for regaining their vision with these new technologies.
- Existing scientific research links visual impairment to depression and suicidal thoughts.

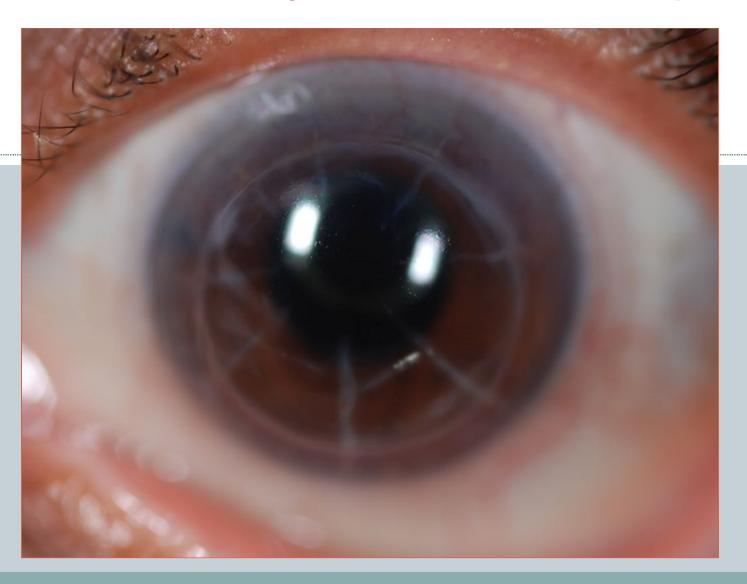
# Radial Keratotomy Scars



# LASIK over Radial Keratotomy



### Radial Keratotomy over Cornea Transplant

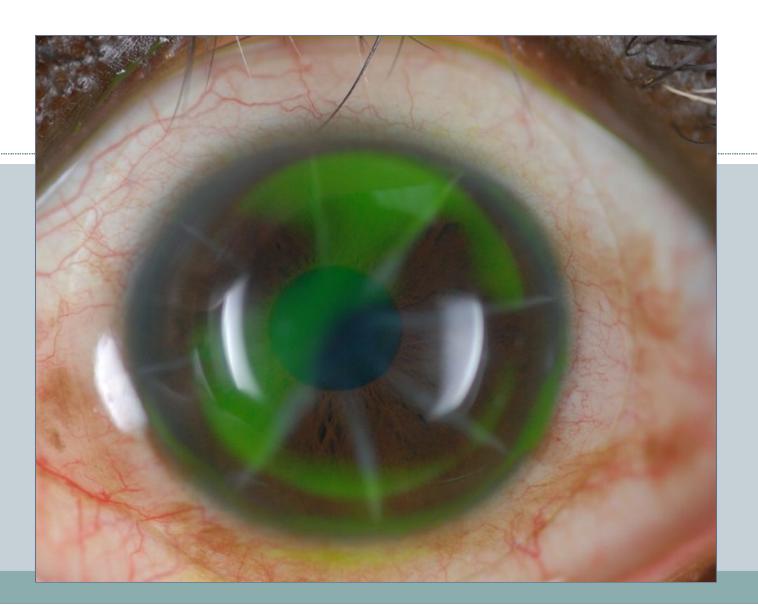




### SynergEyes Lens

- A hybrid contact lens that combines the superior visual acuity of a rigid lens with the comfort of a soft contact lens.
- Rigid center and soft lens skirt: A stable, high oxygen permeable rigid center that delivers consistent RGPlike vision with the comfort of a soft contact lens.

# Synergeyes Lens on RK Cornea



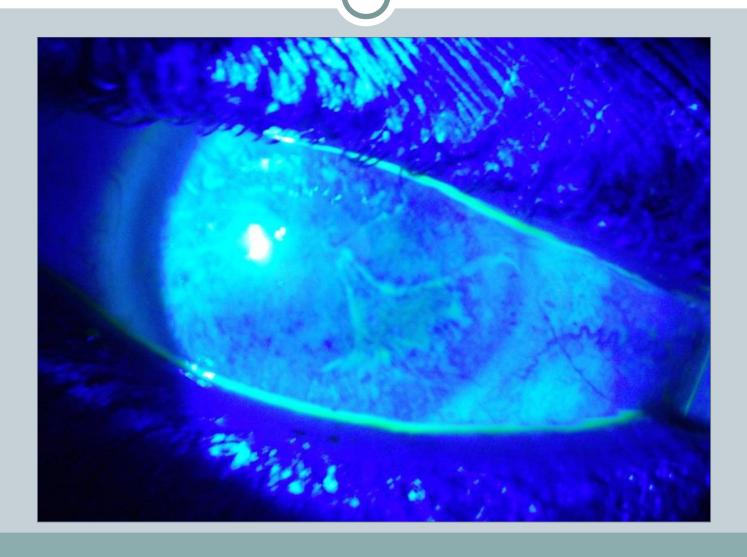
### Synergeyes Lens on Transplanted Cornea



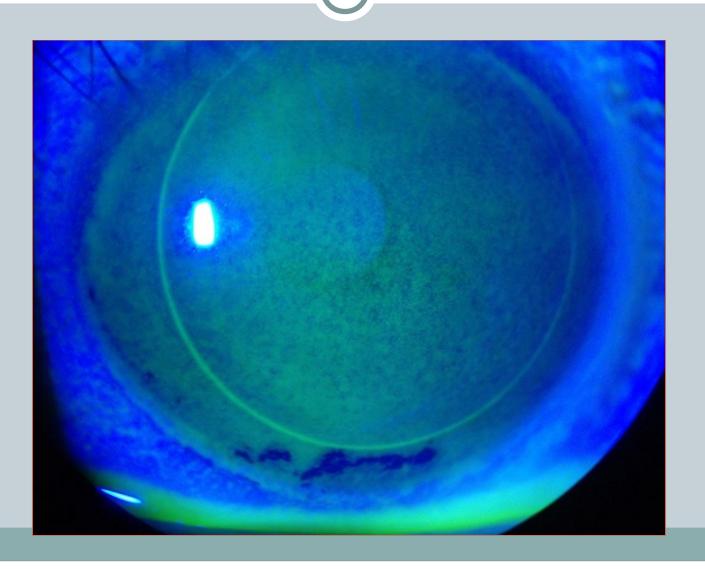
### Scleral Lenses

- Much larger diameter than typical RGP.
- Lens vaults the entire cornea, literally resting on the "white of the eye", the sclera.
- Lens is filled with fluid reservoir, thus also providing a treatment for post-LASIK dry eye.

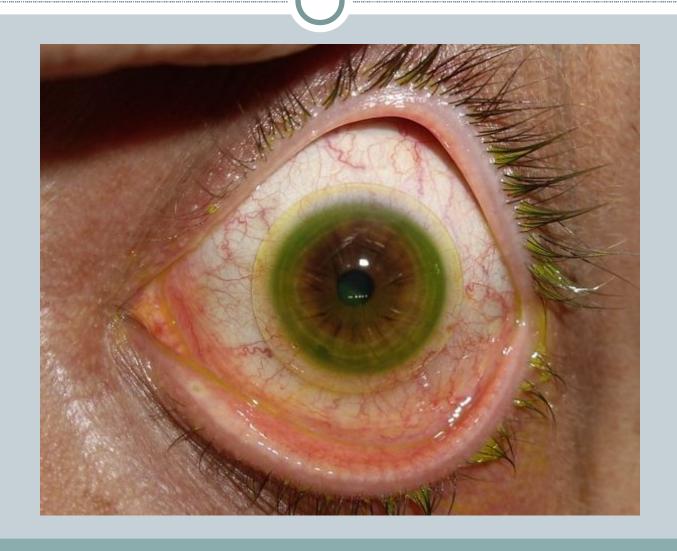
## Extremely Dry Post-LASIK Cornea



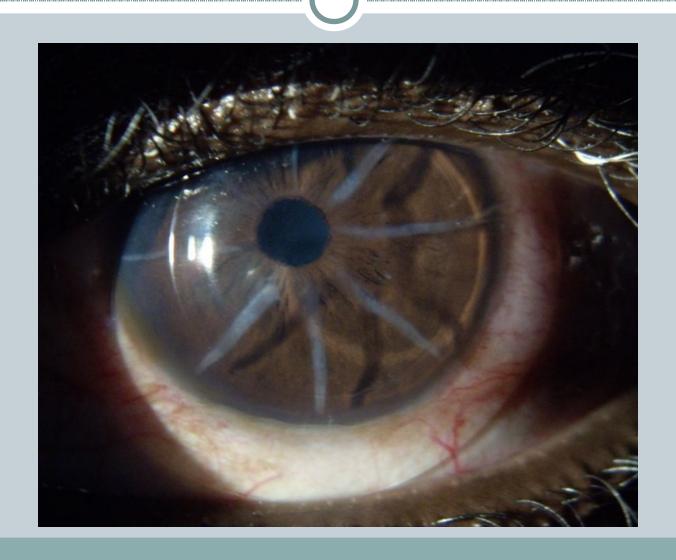
## Extremely Dry Post-LASIK Cornea



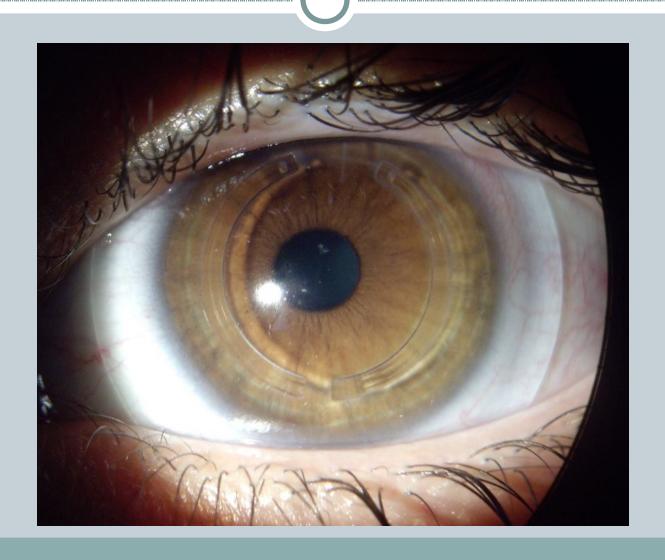
### Scleral Lens on Lasik over RK Cornea



## Scleral Lens on RK Eye



#### Scleral Lens on Post-LASIK Ectasia with Intacs



## Scleral Lens on Transplanted Cornea

