Contact Lens Clinical Pearls Pocket Guide

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www.gpli.info

Vertex Conversion Chart		
minus		plus
-3.87	4.00	+4.25
-4.00	4.25	+4.50
-4.25	4.50	+4.75
-4.50	4.75	+5.00
-4.75	5.00	+5.25
-5.00	5.25	+5.62
-5.12	5.50	+5.87
-5.37	5.75	+6.12
-5.62	6.00	+6.50
-5.75	6.25	+6.75
-6.00	6.50	+7.00
-6.25	6.75	+7.37
-6.50	7.00	+7.62
-6.62	7.25	+8.00
-6.87	7.50	+8.25
-7.12	7.75	+8.50
-7.25	8.00	+8.87
-7.50	8.25	+9.12
-7.75	8.50	+9.50
-7.87	8.75	+9.75
-8.12	9.00	+10.12
-8.37	9.25	+10.37
-8.50	9.50	+10.75
-8.75	9.75	+11.00
-8.87	10.00	+11.37
-9.37	10.50	+12.00
-9.75	11.00	+12.75
-10.12	11.50	+13.37
-10.50	12.00	+14.00
-10.87	12.50	+14.75
-11.25	13.00	+15.50
-11.62	13.50	+16.12
-12.00	14.00	+16.75
-12.37	14.50	+17.50
-12.75	15.00	+18.25
-13.00	15.50	+19.00
-13.50	16.00	+19.75
-13.75	16.50	+20.50
-14.12	17.00	+21.50
-14.50	17.50	+22.25
-14.75	18.00	+23.00
-15.12	18.50	+23.75
-15.50	19.00	+24.75

SPHERICAL GP LENSES

Before the Fit

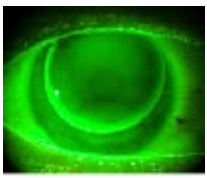
- Present adaptation with terms such as “lens awareness” and “lid sensation.”
- Use a topical anesthetic prior to initial lens application.

Empirical versus Diagnostic Fitting

- *Diagnostic fitting* has the benefit of obtaining an optimum fit and power through the application of lenses.
- *Empirical fitting* has the benefit of often having the first experience with GP lenses be a very positive one visually.

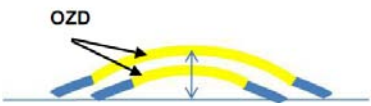
Fitting Pearls

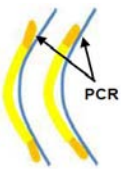
- Use a cobalt blue filter in combination with a yellow (Wratten) filter for optimum evaluation of the fluorescein pattern.
- Strive for an alignment fit. This is often achieved with a base curve radius (BCR) equal to the flatter K reading (termed “on K”) or slightly flatter than K due to the asphericity of the cornea.



Alignment Fit

- *Increasing the optical zone diameter* (OZD) increases sagittal depth and effectively steepens the fit. *Decreasing the OZD* decreases sagittal depth and effectively flattens the fit.





- *Flattening the peripheral curve radius (PCR) and/or increasing the curve width* will increase edge clearance.
- *Steepening the PCR and/or reducing the curve width* will decrease edge clearance.
- When you make a design change, make it a significant one.

  - Change the base curve by ≥0.50D; OAD/OZD ≥ 0.3mm; center thickness ≥0.03mm;
    peripheral curve radius/width ≥1.0/0.2mm.
- Order a plus lenticular to reduce edge thickness on all high minus (≥ -5.00D) and a minus lenticular on all plus and low minus (≤-1.50D) lenses to increase edge thickness.
  - The use of a lenticular, when indicated, in combination with an ultrathin center thickness, will reduce the risk of inferior decentration.
- To predict the lens power, take the spherical refractive value at the corneal plane. If selecting a BCR flatter than K, add the corresponding amount of plus power. If fitting steeper, add minus power (SAM/FAP or steep add minus, flat add plus). Ignore the cylinder power and the steeper K value.
  - **Example:**
    Rx -4.50 -0.75 x 180; K's 43.00 @ 180/ 43.75 @ 090
    BCR 42.50D (0.50D flatter than K)
    The predicted power is -4.25D (-4.50D at the corneal plane) + 0.50D (FAP) = -3.75D

Resources

Resources on fitting and problem-solving GP lenses are available at www.gpli.info.

SOFT TORIC LENSES

Before the Fit

- Patients with as low as 0.75D refractive cylinder are often good candidates.
- If a patient has ≥ 0.75D cylinder and is wearing a spherical lens, provide them with a toric lens to compare the quality of vision.
- One method of determining how good a candidate someone is for soft toric lenses is the "Becherer Twist." With the patient's subjective refraction in the phoropter, twist the cylinder axis knob until the acuity chart first blurs. If the twisting is > 20˚ in each direction, 90% of the patients will be successful. If it blurs at 15˚, 90% success is achieved with two lenses. At 10˚, 70% will be

successful with 3 lenses. If there is blur with < 5˚ rotation, success is unlikely.

The Fitting Process

- Select diagnostic lenses as close to the refractive power at the corneal plane as possible.
    - **Example**: a patient with a refraction of: -4.75 -1.50 x 180 should be fit with a diagnostic lens of -4.50 -1.25 x 180 (the powers at the corneal plane). If the exact cylinder power is not available, select the lower cylinder power lens. For instance, if the patient has -1.50 x 180 cylinder power at the corneal plane and the soft toric lens cylinder is available in either -1.25 or -1.75 x 180, select the -1.25 x 180 lens.
- Allow the lens to settle for a minimum of 10 minutes prior to evaluation.
- To determine the amount of lens rotation, use a degree scale on the biomicroscope to line up an optic section with the axis mark on the lens. With this method, an exact amount of rotation can be read directly off the degree scale. If this scale is not available, the clock approach can be used to estimate the amount of rotation. With this method, each hour on a clock is equivalent to 30˚.
- To determine the axis of the final lens, use the "left add, right subtract" (LARS) technique. If the patient has a refraction of -2.00 -1.25 x 180, and a lens with these identical parameters is applied to the right eye and rotates 10˚ to the observer/practitioner's right (nasally), a lens with an axis of 170˚ should be fit. If it rotates 10˚ to the observer's left (temporally), a lens with a 10˚ axis should be fit.
    - Subtract the amount of rotation from the prescription, not the diagnostic lens. Also, the final lens ordered should fit in the same skewed position as the diagnostic lens.

Rx axis at 180° and no rotation; Order Lens Axis at 180°

Rx axis at 180° and 10° right rotation; Order Lens at Axis 170°

Rx axis at 180° and 10° left rotation; Order Lens at Axis 010°

Poor Visual Response

- If reduced vision is present with a spherical over-refraction (OR), a sphero-cylindrical OR should be performed. To determine the recommended cylinder power and axis based upon the OR, use one of many available cross cylinder calculators. These may be found on the AOA Contact Lens and Cornea Section web site, www.eyedock.com, as well as many soft lens company web sites.
- If the patient experiences a persistent problem with vision due to lens rotation or other reasons, a GP lens should be considered.

GP BACK SURFACE AND BITORIC LENSES

Before the Fit

- Good candidates are individuals with > 2.00D of corneal cylinder who do not achieve good centration and/or have a poorly aligned fit, are dissatisfied with their vision from soft toric lenses, or have critical vision needs.
- *Decision-Making Process*
    - A back surface toric lens induces a cylinder equal to almost half of the back surface toricity with the same axis (the exact amount depends upon the refractive index of material).
    - When the cylinder is corrected on the front surface, it results in a bitoric lens.
    - A back toric design (spherical front surface) is recommended when the residual astigmatism is approximately one half of the back surface toricity and has an axis equal to the flat K reading. This should also be considered when the patient's refractive cylinder is approximately 1½ times the corneal cylinder.

Empirical Versus Diagnostic Fitting

- *Diagnostic fitting* has the benefit of obtaining an optimum fit and power through the application of lenses. Diagnostic fitting sets are

typically available from your laboratory. 3.00D toricity sets are especially popular.

- *Empirical fitting* has the benefit of often having the first experience with GP lenses be a very positive one visually. Mandell-Moore and the Quinn GP Toric calculators are simple and successful methods of calculating the base curve radii and powers based on the refraction and K values. These guides are available at www.gpli.info.

Fitting Pearls

- Bitoric lens power determination only differs from spherical lenses in that two tear lens power calculations are needed, not one.
- The flatter base curve is typically selected approximately 0.25D flatter than flat K. The steeper base curve radius is typically 1.00D flatter than steep K. This creates 0.75D of toricity, which would simulate the ideal cornea to fit a spherical lens. The result should be an alignment fitting relationship.
- If a diagnostic lens is selected, a spherical over-refraction should be performed and the resulting power should be added to the power in each meridian. If the diagnostic lens powers are plano in the 180˚ meridian and -3.00D in the 90˚ meridian and the over-refraction is -1.00D, the final powers are -1.00D and -4.00D. This lens can rotate on the eye without affecting vision (spherical power effect).
- If the patient has residual astigmatism, it is likely that a sphero-cylindrical over-refraction will result in optimum acuity. If so, the over-refraction in one meridian should be added to the diagnostic lens power in that meridian. In the above example, if the over-refraction is -1.00 -1.00 x 180, -1.00D would be added to plano, and -2.00D (in the 90˚ meridian) would be added to -3.00D resulting in powers of .00D / -5.00D.
- Toric GP lenses are not often indicated with irregular cornea patients as the refractive axis differs from the corneal axis and bitoric designs have base curve radii and corresponding powers 90˚ apart.

MULTIFOCAL LENSES

Decision-Making Process

- Explain all options to every presbyope or emerging presbyope including single vision lenses/reading glasses, monovision, and multifocal lenses.
    - The benefits of multifocals versus monovision include the quality of vision at all distances out of both eyes.
    - Many comparison studies between soft and/or GP multifocals versus monovision have resulted in approximately 75% of the patients preferring multifocals.
    - Monovision is indicated when the patient either has miotic pupils - therefore very little power effect is obtained from the paracentral aspheric region – or pupils larger than 6mm, which will result in visual disturbance from the mid-periphery of the lens, and does not have critical vision needs.
- Determine what the patient's goals are from these lenses.
    - Have the patient rank the importance of distance, intermediate, and near vision and by concentrating on the two most important, the patient will likely be satisfied with the vision at all distances with multifocal lenses. But, it is best to not make any guarantees!
- Patients need to be given realistic expectations.
    - Most contact lens multifocal designs utilize the simultaneous vision principle in which multiple corrections are in front of the eye at the same time. Some blur may be noted when compared to spectacles.
    - In addition, it may take a lens exchange or two to achieve a successful fit and acceptable vision.
    - Finally, patients should never be told that they will not require spectacles. Some multifocal wearers appreciate a low minus over-correction when driving while others may desire some additional plus for reading fine print.
    - If they are patient and motivated they will most likely be successful.

The Fitting Process

- Important tests to perform include pupil size measurement, tear film evaluation, and determining lower lid position.
- When possible, it is important that the patient's first experience in multifocal lenses is with lenses in their prescription so use lenses from a soft lens inventory or empirically fit GP multifocals.
- If, after performing visual acuities at both distance and near, vision is reduced out of one eye at a particular distance, over-refract monocularly with hand held trial lenses or a flipper bar and with both eyes open.
- When assessing vision at near, make sure the patient is reading material (magazine, book, etc.) that is similar in font to their everyday material and consistent with what they desire to see well at near.
- Once the lenses have been evaluated, have the patient walk around the office and perform normal visual tasks. Encourage binocular viewing. Discourage viewing monocularly (the "contact lens salute").
- If satisfactory vision and fitting relationship is achieved, schedule an appointment, at minimum, one week later to allow the patient to become adapted to the lenses.

Soft Multifocal Lenses

- Good candidates include individuals who do not have critical vision demands, have ≤ 0.75D refractive cylinder (unless using toric multifocals), and are satisfied spherical soft lens wearers. If they decide to be fit with soft multifocals, they should be informed about the GP multifocal option if vision becomes problematic.
- For the initial diagnostic lens, select the power to be equal to the spherical equivalent of the manifest refraction at the corneal plane (unless otherwise recommended by the manufacturer). For example, if the refraction at the spectacle plane is -4.50 -0.50 x 180, the initial diagnostic lens would be equal to -4.50D.

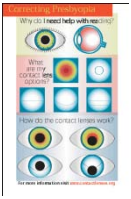
- The final lens power should be the lens that emphasizes "least minus, most plus" if there is a range of lenses that provide acceptable distance vision.
- Allow the lenses to settle at least 10 minutes after application before evaluation.
- Be sure to consult the manufacturers' fitting guides and problem solving recommendations for their unique lens design.

GP Multifocal Lenses

- This is a viable option for patients with critical vision demands.
- Aspheric lenses
    - Aspheric lenses are a viable option except for individuals who have a large (≥ 6mm) pupil diameter. For uninterrupted vision at distance and near, segmented translating (bi) multifocal lenses are recommended. Aspheric lenses should result in an alignment fitting relationship, good centration, and limited (1mm) movement with the blink.
    - If the lens moves excessively, select a lens with a 0.50D steeper base curve radius.
- Segmented lenses
    - Segmented, translating bifocal lenses typically have the seg line positioned at or slightly below the lower pupil margin. Many designs have an aspheric or segmented intermediate zone, which should be positioned right above the lower pupil margin.
    - The lens should move minimally (1mm) with the blink.
    - Poor candidates for this design would include anyone with a low positioning lower lid.
    - When viewing through the biomicroscope, have the patient view inferiorly and the lens should shift upward or translate as the edge contacts the lower lid.
    - If the lens does not translate (or only does so intermittently), increase edge clearance with a flatter base curve radius or peripheral curve radius.

- If the lens moves excessively, increase the prism ballast.

- For assistance with problem-solving GP bifocal and multifocal lens designs, the Contact Lens Manufacturers Association (CLMA) member laboratory consultants are an invaluable resource. In addition, the GP Lens Institute has numerous resources, like the one pictured here, available at www.gpli.info.



ORTHOKERATOLOGY

Before the Fit

- Good candidates include < 5.00D myopia, ≤ 1.50D WTR corneal cylinder or ≤ 0.50D ATR cylinder; < 6mm pupil diameter.
- Important screening tests include refraction, slit lamp evaluation, and corneal topography.
- Topography will rule out patients with irregular corneas as well as provide corneal eccentricity values.

The Fitting Process

- The "Jessen formula" can often be used to determine the base curve radius.
  - It uses the FAP (flat add plus) tear lens factor to result in a final power of +0.75D, which will allow for regression during the day.
  - If the patient has a refractive error of -3.00 -0.75 x 180 and keratometry values equal to 44.00 @ 180/ 44.75 @ 090, the base curve should equal 3.75D (3.00D + 0.75D) flatter than K, which is equal to 44.00D -3.75D or 40.25D.
  - The initial diagnostic lens is selected in an effort to achieve a bull's eye fluorescein pattern (central bearing, paracentral pooling, midperipheral bearing, and slight peripheral clearance).
- Wait at least 10 to 15 minutes before evaluating the fit.
  - Good centration with minimal (≤ 1mm) lag with the blink is desired.
- The patient should be evaluated the morning after dispensing.
  - Assess the lens to cornea fitting relationship.

- The lenses should be removed to assess corneal integrity. If coalesced corneal staining is present, the lens is too flat centrally. Improvement in unaided visual acuity should be present.
- Corneal topography should be performed and a bull's eye pattern (central flattening, paracentral steepening) should be present.
- If superior flattening is present with an inferior arc of steepening ("smiley face"), the lens is too flat. If little change is present with slight central steepening ("central island"), the lens is too steep.
- If no obvious topography pattern is present, the patient should wear the lenses for 2 more days and be re-evaluated.

- On average, it takes 10 days to reach the treatment goal although it will likely be less for lower myopic and higher for more moderate myopic powers.
- Provide the patient daily disposable lenses of gradually decreasing power to wear during the treatment period and re-evaluate at one week.
- At the end of the treatment period, the lenses should be worn on a retainer basis. This can be anywhere from every night for higher myopic patients to once a week for very low myopes.
  - Patients can self-monitor retainer wear. Whenever the distance vision becomes blurred, they can wear the lenses overnight.
- Applying a highly viscous artificial tear prior to inserting the lens has been found to optimize centration and lessen corneal staining.
- Lens removal should not occur immediately upon awakening.
- Rewetting drops should be applied before removal and the lower lid margin can be used to gently nudge the lower lens edge to break suction if present.
- Further expertise through certification and examinations are available at www.paragoncrt.com and www.bausch.com as well as from the Orthokeratology Academy of America at www.okglobal.org.

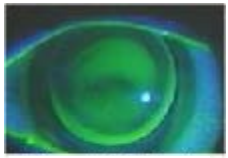
KERATOCONUS

Before the Fit

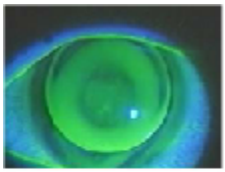
- Hallmark clinical signs of keratoconus are Fleischer's ring and Vogt's striae.
- In keratoconus, the steepest area of the corneal topography is typically >48.00D. Also, if the eccentricity value is greater than or equal to 0.8, it is likely keratoconus.
- In a moderate to advanced keratoconic patient, in the absence of a corneal topographer, the use of a +1.25D trial lens over the patient's side of the keratometer will extend the range by about 8.00D. A +2.25D trial lens will extend the range by approximately 14.00D.

The Fitting Process

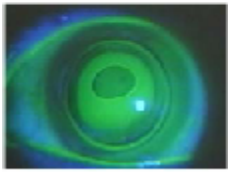
- If the apex of the cone is relatively small and centrally located, a traditional small diameter keratoconic lens can be used.
- If a large oval or globus cone is present or the apex is decentered inferiorly, intralimbal, scleral, piggyback, or hybrid designs have all been successful.
- With most designs, minimal apical clearance or mild touch is desired. This "three point touch" or bull's eye fluorescein pattern is most likely achieved on a relatively well-centered apex.
    - Gross apical bearing can result in corneal staining and possibly scarring.
    - Excessive apical clearance can result in peripheral seal off.
    - The presence of excessive inferior edge clearance can be remediated with designs that allow the inferior edge to tuck in (flat-steep, ACT, quadrant specific).



Three Point Touch



Excessive Apical Bearing



Excessive Apical Clearance

- A piggyback design combination should be considered if a GP lens alone results in either poor centration, less than optimum comfort, or if scarring is present.
    - A very low power (0.50D) silicone hydrogel soft lens can be placed under the GP. Due to the lens combination it is important that a hyper Dk (>100) GP material be used.
    - If the patient has a low corneal apex resulting in the GP lens positioning low on the soft lens, the use of a moderate plus power (+6.00D) soft lens may help the GP lens center due to the thicker center of the soft lens. This should result in little to no change in the GP power as a soft lens contributes only about 20% of its power when used in a piggyback system.
- For assistance with keratoconic patients, communicate with your CLMA member laboratory consultant.
- For resources contact the National Keratoconus Foundation (www.nkcf.org) and the GP Lens Institute (www.gpli.info).

SCLERAL LENS FITTING AND HANDLING

Definition and Applications

- Scleral lenses can be divided into the following categories based upon overall diameter:
    - Corneo-scleral (12.9mm to 13.5mm)
    - Semi-scleral (13.6mm to 14.9mm)
    - Mini-scleral (15.0mm to 18.0mm)
    - Scleral (>18.0mm)
- Scleral lenses are indicated in cases of irregular corneas although corneo-scleral lenses have been recommended for healthy cornea patients and scleral lenses have been successful for patients with dry eye syndrome and scarred, severely pathological corneas.

Lens Handling and Patient Education

- Lens Insertion (non-fenestrated):

- For initial fitting evaluation, the lens should be completely filled with isotonic, non-preserved artificial tears (e.g. OPTIVE™ Sensitive, Unisol 4). Fluorescein from a strip should be added to the filled bowl. The lens can be supported on a large DMV scleral suction cup or equivalent. Alternatively, a *tripod* made up of the thumb, middle, and index finger, can be used.
- The face should be parallel to the ground and the lids must be retracted and well-controlled. The patient should look straight down toward the ground. The patient should retract the upper lid while the practitioner retracts the lower lid and raise the lens onto the eye in one continuous motion. The lids should be released prior to lowering the supporting suction cup. If seated, cover the patient's lap with paper towels before insertion as some of the solution and fluorescein will overflow and could stain clothing.
- If a large bubble is observed after insertion, either the lens was not inserted in one continuous motion or the lens well was not completely filled with solution. Remove the lens and reinsert.

- Lens Removal:
  - As the lens will likely be suctioned, always loosen the lens prior to removal. An appropriate rewetting drop should be applied and the inferior periphery of the lens should be gently pushed in a repeated motion for several seconds.
  - With the superior lid well controlled, the inferior lid can be used to lift the lower portion of the lens away from the eye.
  - Alternatively, a medium DMV suction cup can be used. If so, it should be applied to the inferior lens periphery and then pulled in a direction that is down and out with the removal force directed perpendicular to the lens surface, not along the visual axis.

Fitting Principles

- It is important for the lens to completely vault the cornea while aligning the lens to the bulbar conjunctiva.
- Choose the Overall Diameter
  - In general, larger lenses can hold more fluid in the corneal chamber and tend to be more forgiving for the fitter, allowing for more clearance over the cornea.

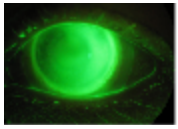
- Smaller lenses must more closely vault the cornea and demand a more precise central fit.
- For the most irregular corneas, choose a larger lens diameter (mini- versus semi- or corneo-scleral diameter when possible).
- In addition, some manufacturers provide guidelines for selecting an overall diameter based on horizontal visible iris diameter.

- Choose an Initial Trial Lens
  - Follow manufacturer's fitting guide or try a more simple approach.
  - Standing beside the patient, look at the corneal profile. If very steep, choose a steeper base curve. If flat, choose a flatter base curve. If average, choose an average base curve.
  - These lenses are fit on the basis of sagittal height, so this method can be very effective when used properly.
- Examine the Corneal Fit
  - With white light and an optic section at high illumination and medium magnification, set the slit lamp housing off axis and examine the central corneal clearance.
  - You will see several layers in cross section. The outermost band (dark black) is the lens. The dark area is straddled by two hairline reflections that arise from the front and back surface of the lens. Compare this black layer to the tear lens (green).
  - For example, if the trial lens is known to have a thickness of 300 microns and the tear lens appears to be half that thickness, then the lens vaults the cornea by approximately 100 to 150 microns, which is ideal clearance although this varies by design and is often less if the lens is fenestrated.
  - Apply trial lenses until an acceptable central clearance value has been achieved.
  - Note that after applying any type of scleral lens, it will settle into the conjunctiva over a 30 to 40 minute period. This will decrease the corneal vault and

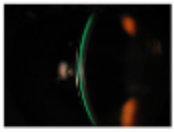
possibly lead to touch in an area that was vaulted upon initial application of the lens.

- A trial lens that shows gross, excessive vaulting of the central cornea initially should be removed and replaced with a flatter base curve.
- However, if the corneal vault is only mildly excessive upon initial application of the trial lens, it is best to allow the lens to settle since it may yield an ideal corneal vault after 30 to 40 minutes.

- Corneal versus Peripheral Fitting Relationship
  - Overall, the fit of a scleral lens can be divided into two parts; the central fit (over the cornea called the "corneal chamber") and the peripheral fit (over the conjunctiva).
  - Examine the entire corneal chamber under diffuse cobalt blue and high illumination. Note any areas of bearing just as with a corneal GP contact lens.
  - When fitting an irregular cornea, it is common to observe touch or bearing in the mid-peripheral or peripheral cornea once acceptable central clearance has been obtained.
  - In these cases, additional clearance must be created in the problem area without grossly increasing the central clearance.
  - A reverse geometry design can be employed to vault over the areas of touch/bearing, but compensatory flattening of the base curve must be done to avoid excessive central clearance.

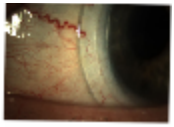


Good Fit



Good Fit - Optic Section

Good Fit - Down Gaze



Scleral Compression

- The peripheral portion of the lens should align with the bulbar conjunctiva.
- Impingement occurs when there is compression or focal blanching of blood vessels, which can occur anywhere on the scleral haptic, not just the edge.
- Compression, or general indentation of the conjunctiva, whether at the edge or mid-periphery of the lens, may result in seal off, suction and indentation.
- When blanching occurs, flatten the peripheral curve associated with the area of blanching.
- Excessive movement and/or bubble formation after lens insertion may indicate the peripheral curve(s) are too loose; therefore, tighten the peripheral curve(s).

Over-topography

- It is beneficial to perform computerized topography over the contact lens in situ after it has settled for a few minutes. This can reveal any lens flexure. More than about 0.50D of toricity can be significant and should be addressed by increasing the center thickness if it interferes with vision.

Check for Tear Exchange

- Before a scleral lens is dispensed, proper tear exchange must be demonstrated. Apply the lens without fluorescein in the filling media. After the lens has been properly applied, instill a generous amount of fluorescein dye over the top of the lens with a dye strip. Periodically examine the tear lens and check for dye that has made its way behind the lens into the tear chamber. After several minutes, there should be at least a small amount of dye in the tear lens.
- Tear exchange does not need to be rapid, but it is critical for a proper fit. If in the test for tear exchange there is no fluorescein seen in the corneal chamber after waiting for several minutes, flatten the peripheral fit or increase the overall diameter.

Diopter to Radius (mm) Conversion Chart			
Diopter	Radius	Diopter	Radius
34.00D	9.92mm	44.00D	7.67mm
34.25D	9.85mm	44.25D	7.63mm
34.50D	9.78mm	44.50D	7.58mm
34.75D	9.71mm	44.75D	7.54mm
35.00D	9.64mm	45.00D	7.50mm
35.25D	9.57mm	45.25D	7.46mm
35.50D	9.50mm	45.50D	7.42mm
35.75D	9.44mm	45.75D	7.38mm
36.00D	9.37mm	46.00D	7.34mm
36.25D	9.31mm	46.25D	7.30mm
36.50D	9.24mm	46.50D	7.26mm
36.75D	9.18mm	46.75D	7.22mm
37.00D	9.12mm	47.00D	7.18mm
37.25D	9.06mm	47.25D	7.14mm
37.50D	9.00mm	47.50D	7.11mm
37.75D	8.94mm	47.75D	7.07mm
38.00D	8.88mm	48.00D	7.03mm
38.25D	8.82mm	48.25D	6.99mm
38.50D	8.76mm	48.50D	6.96mm
38.75D	8.70mm	48.75D	6.92mm
39.00D	8.65mm	49.00D	6.89mm
39.25D	8.60mm	49.25D	6.85mm
39.50D	8.54mm	49.50D	6.82mm
39.75D	8.49mm	49.75D	6.78mm
40.00D	8.44mm	50.00D	6.75mm
40.25D	8.39mm	50.25D	6.72mm
40.50D	8.33mm	50.50D	6.68mm
40.75D	8.28mm	50.75D	6.65mm
41.00D	8.23mm	51.00D	6.62mm
41.25D	8.18mm	51.25D	6.58mm
41.50D	8.13mm	51.50D	6.55mm
41.75D	8.08mm	51.75D	6.52mm
42.00D	8.04mm	52.00D	6.49mm
42.25D	7.99mm	52.25D	6.46mm
42.50D	7.94mm	52.50D	6.43mm
42.75D	7.89mm	52.75D	6.40mm
43.00D	7.85mm	53.00D	6.37mm
43.25D	7.80mm	53.25D	6.34mm
43.50D	7.76mm	53.50D	6.31mm
43.75D	7.71mm	53.75D	6.28mm