synergeyes® KC

hybrid contact lens for keratoconus

SynergEyes® KC Fitting Guide and Tips for Achieving Success

Fitting Guide

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The *SynergEyes® KC* Hybrid Contact Lens

The *SynergEyes® KC* design is ideal for the highly prolate cornea, found with keratoconus and other ectasias, in which an unusually steep cornea is surrounded by relatively flat, normal corneal curvatures.

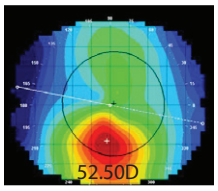

FIGURE 1
Select the closest BC radius in relation to keratoconus apex radius

Step 1: Determine the initial diagnostic lens base curve by selecting the **closest base curve radius in relation to the keratoconus apex radius.*** *(see Figure 1)*.

Example: Keratoconus apex= 52.50D
*Round down (steeper) to nearest base curve = 6.30BC (53.50D).

Note: In the absence of topography, use steep K to determine initial diagnostic lens base curve.

Step 2: Start with the determined base curve in the **medium skirt curve** option.

Step 3: Instill one (1) drop of high molecule fluorescein (FluoreSoft®) into the bowl of the lens and apply *(see Figure 2)*. Allow excess fluorescein to dissipate (15-30 seconds).

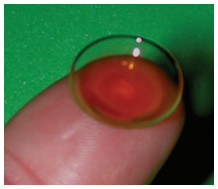

FIGURE 2
Evaluate the lens/cornea fitting relationship using high molecule fluorescein

Step 4: Observe fluorescein pattern and evaluate the lens/cornea fitting relationship in the following manner:

Ideal *SynergEyes® KC* Fit:

- Apical clearance over central cornea has little or no touch in rigid portion of lens
- Corneal clearance free of central bubbles
- Light touch at 9mm chord diameter – **landing occurs in soft skirt** *(see Figure 3)*
- Alignment under soft skirt
- Soft skirt free of scleral impingement
  - If edge impingement is observed, switch to flatter skirt curve radius
- Soft skirt free of edge fluting
  - If edge lift or "fluting" is observed, switch to steeper skirt curve radius
- Lens free to move on lid-push-up
- **The optimum *SynergEyes® KC* lens will demonstrate apical clearance with the steepest base curve that is free of central air bubbles *(see Figure 4)*.**

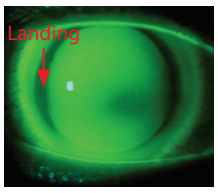

FIGURE 3
Landing occurs in soft skirt

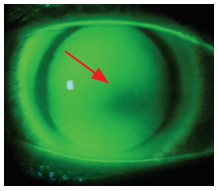

FIGURE 4
Apical clearance with the steepest base curve

Step 5: When ideal fluorescein pattern is achieved, over-refract to determine final lens power for the selected base curve radius. If the over refraction is greater than 4.00D, adjust for vertex distance. *SynergEyes® KC* diagnostic lenses range from -4.00D to -14.00D sphere power depending on the base curve selection as follows:

Sphere Power of Diagnostic Lenses

BASE CURVE	SPHERE POWER	BASE CURVE	SPHERE POWER
7.10	-4.00D	6.30	-10.00D
6.90	-5.00D	6.10	-12.00D
6.70	-6.00D	5.90	-14.00D
6.50	-8.00D	5.70	-14.00D

Tips for Achieving Success

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1 IF BUBBLES ARE PRESENT, remove lens and re-insert with fluorescein in bowl of lens. Identify the shape and location of the bubbles.

a. If a large central bubble is present, *(see Figure 5)* flatten (increase) the base curve radius.

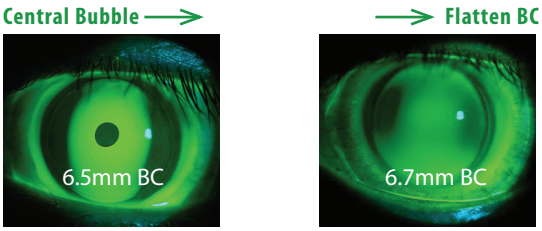


FIGURE 5

Note: Fit the steepest base curve that is free of bubbles with greater than 2mm diameter. Smaller bubbles will typically dissipate.

2 IF SIGNIFICANT TOUCH IS OBSERVED, note the location of the touch area.

a. If the area of touch is observed at the steepest area of the cornea *(Figure 6)*, steepen (decrease) the base curve radius.

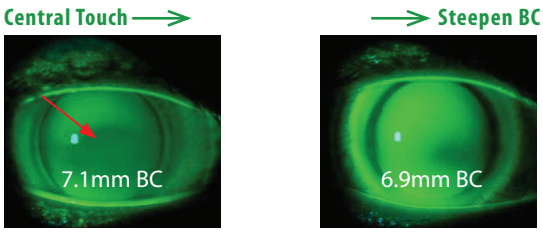


FIGURE 6

b. If significant touch is observed peripherally at the rigid/soft junction *(Figure 7)*, steepen (decrease) the skirt curve radius.

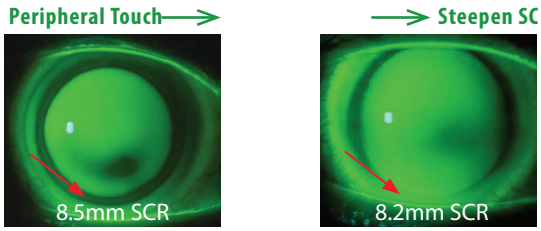


FIGURE 7

Additional Fitting Tips

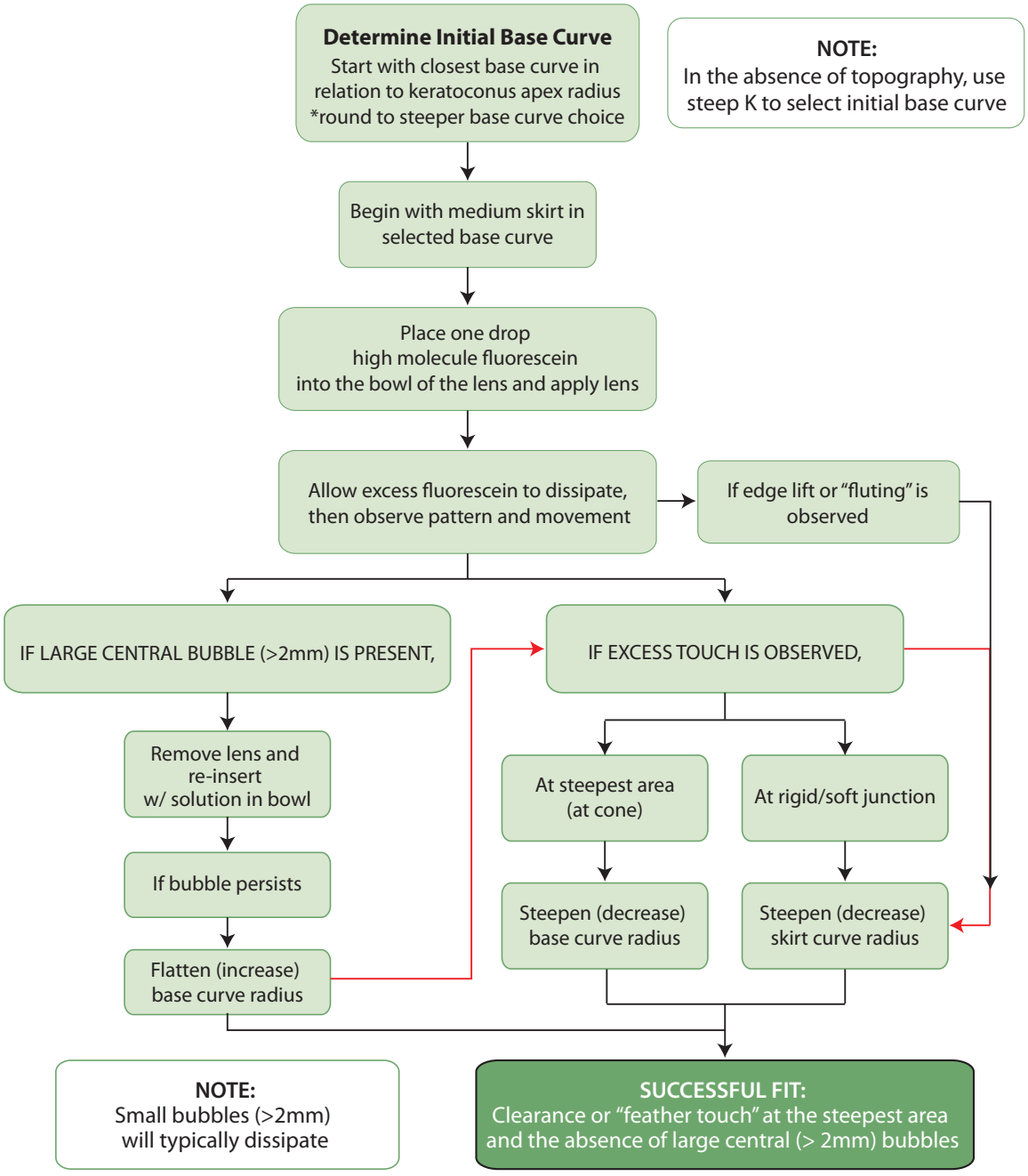
- A successful *SynergEyes® KC* fit demonstrates total apical clearance. A well-fit lens should come to a soft landing where the base curve joins the skirt curve, with minimal touch in the rigid portion of the lens.
- The steeper skirt curve radius will add sagittal depth to the lens and lift the bearing point to produce a lighter landing. This step will improve comfort and prevent late onset tightening.
- Many corneas with emerging or moderate keratoconus may be fit with the *SynergEyes® A* lens design.
- *SynergEyes® KC* is required with significant ectasia and high eccentricity.
- Use of a Wratten filter may be helpful in viewing fluorescein patterns.

For *SynergEyes® KC* consultation please call

877.733.2012

option 2

SynergEyes® KC Fitting Flowchart



SynergEyes® KC Parameters

Material	Paflufocon D center (hemiberfilcon A skirt)
Water Content	27% (soft skirt)
Base Curve	5.70 to 7.10 in 0.2mm steps
Diameter	14.5mm
Skirt Curvature	Steep, Medium, Flat
Sphere Power	Plano to -20.00 in 0.50D steps
Dk	100
Wear Indications	Daily Wear
Replacement Cycle	Every 6 Months
Lens Care Recommendations	Chemical or Hydrogen Peroxide
Delivery	1-2 Weeks