

BE Retainer

Initial Trial Flow Chart

When practicing BE Retainer Optimal Orthokeratology, the following steps need to be performed during the initial work-up and diagnostic fitting process:

Work-up:

1. Full Eye Health and Refractive Examination
 - Patient History
 - Acuity: aided, Unaided (each eye) and binocular
 - Biomicroscopy: evidence of ocular disease, scarring, vascularization, surface staining, endothelial changes etc.

2. Perform Topography
 - 4 maps on each eye (symmetrical, similar appearing and quality ring reflection)
 - Target Standard Deviation of:
 - Apical Curvature: <0.02mm (ideally <0.01mm)
 - Sagittal Height: <2 microns (ideally <1 micron)
 - Take additional maps if the initial captures are poor or exhibit a high SD
 - Record: Apical Curvature (Ro), Sagittal Height, HVID & pupil size

3. Calculate Initial BE Retainer Diagnostic
 - Run BE Retainer Software
 - Enter patient details
 - Enter corneal data taken from the topographer
 - Calculate “BE Retainer Potential” (good candidates have plus (+) power “Adjustments” and not >-1.00D over potential)
 - Note Treatment Zone size (good candidates have a pupil size smaller than the indicated treatment zone size +1.00mm)
 - If the patient is a good candidate in Rx potential and Tz size, then calculate the BE Retainer diagnostic

4. Insertion, Removal and BE Retainer Training
 - Instruct the patient on the proper insertion technique (fill back surface of Retainer with solution & insert)
 - Instruct the patient to recognize adherence and the proper freeing of a bound lens
 - Instruct the patient on the proper removal techniques (once a bound lens has been freed)
 - Provide fitting schedule, tips, AM procedure and return visit details
 - Dispense BE Retainer diagnostic lenses and readers if necessary

Post Treatment Evaluation:

5. Schedule an early AM appointment
 - Minimize the open eye environment to reduce the chances of rejection due to discomfort and to limit the lid effects on the physiological and topographical response
6. Biomicroscopy
 - Check for the correct lens color on each eye (red/right; yellow/left)
 - Check for the adherence and proper release if bound
 - Remove BE Retainer diagnostic lenses
 - Check physiological response (note any staining and degree)
7. Acuity Check (monocular and binocular)
8. Capture Post Treatment Topography
 - 1 quality post treatment map each eye (large fissure, quality ring reflection)
 - Take additional maps if staining is evident or topography looks atypical
9. Determining Topographical Response
 - Select best pre-treatment map
 - Select best post treatment map
 - Select Subtractive or Difference map function
 - The following map views will display:
 - Axial: Rx change, treatment zone position
 - Tangential: Position of Retainer in closed eye environment
 - Refractive: Position of Rx effect (post treatment only)
 - Determine topographical response:
 - Bulls-eye
 - Central Island
 - Smiley Face
 - If topographical result is unclear, schedule additional consecutive nights in the same trial
 - If topographical result is a clear SF or CI, schedule a retrial in another BE Retainer diagnostic parameter
 - If the topographical result is a clear Bulls Eye, custom order the Retainers
 - Dispense soft disposables if the patients VA needs improvement following diagnostic wear