Post - Lasik Fitting

Corneosclerals

Fitting on post-lasik cornea is a bit different to standard as the central cornea is artificially flat compared to the peripheral cornea. Empirical (Ks and Rx) supply is inaccurate so fitting set assessment is best.

Lets imagine a Px had Ks pre-lasik of 7.80 and Rx -4.00. -4.00 = 0.8mm so the central cornea after lasik should be 8.60. If we measured the Ks as 8.60 and fitted an 8.60 BOZR it would be too flat as the peripheral cornea is unchanged and still 7.80.

In most cases no pre-lasik Ks are known. So we need to use trial lenses to establish a good peripheral and edge lift fit. This will of course leave a very steep central area of central pooling with NaF due to the laser burn.

Insert a trial lens with BOZR similar to pre-lasik Ks, if pre-lasik info is not available a suggested lens is 7.70. (Population average Ks are 7.80). Make sure you get lots of solution in the lens when you insert them as the steep centre can be prone to trapping a bubble with the trial lenses. Assess the peripheral cornea and edge whilst ignoring the central area that will be very steep.

Alter the BOZR in 0.2 steps if the periphery and edge look flat or steep until an appropriate fit is achieved.

Perform refraction to get over-refraction and VAs. Keep to a spherical OR which is most common.

Then advise of that info e.g. 7.70 CSL/-3.00, OR -4.00, and supply measured Flat Ks e.g. 8.50

We will supply a Post Lasik (8.50:6.00) 7.70 CSL / -3.00 (Lab will calculate power based on supplied BOZR and OR).

Fitting pattern will still show some central pooling, ensure patients put a drop of solution in the lens on insertion.