Fitting advice and guide for soft contact lenses

Diameter and Base curve choice for the first contact lens

1. Measurement of the corneal diameter (HVID + 0.6 mm)* and K-readings
2. Determine the contact lens diameter $Ø_T$ (use table below)
3. Determine of the Base curve $r_0 = r_{cfl} + BCf$ (use table below, r_{cfl} = flattest central K)

		Corneal diameter							
		small		medium			large		
		11.10	11.30	11.50	11.70	11.90	12.10	12.30	12.50
Contact lens diameter	13.20	0.60	0.50	0.40					
	13.40	0.70	0.60	0.50	0.40				
	13.60	0.80	0.70	0.60	0.50	0.40			
	13.80	0.90	0.80	0.70	0.60	0.50	0.40		
	14.00	1.00	0.90	0.80	0.70	0.60	0.50	0.40	
	14.20	1.10	1.00	0.90	0.80	0.70	0.60	0.50	0.40
	14.40	1.20	1.10	1.00	0.90	0.80	0.70	0.60	0.50
	14.60		1.20	1.10	1.00	0.90	0.80	0.70	0.60
	14.80			1.20	1.10	1.00	0.90	0.80	0.70
		Base Curve factor (BCf)							

Orbis (ØCorna + 2.10 mm / BCf = 0.60 mm)

Toris Bal – Torelis Bal – Borelis (ØCornea + 2.30 mm / BCf = 0.70 mm)

Toris Int/Ext – Torelis Int/Ext (ØCornea + 2.50 mm / BCf = 0.80 mm)

Example: Parameter for Toris Ballast:
Cornea parameters: ØCornea = 11.70 mm / Kreading = 7.80 / 7.70 mm
- $Ø_T$ = 11.70 mm + 2.30 mm = 14.00 mm
- r_0 = 7.80 mm + 0.70 mm = 8.50 mm

for 0.40 mm delta K, reduce 0.10 mm on r_0

Definitive 74: 0.10 mm steeper

* Information: 80% of the corneal curves are statistically between 11,3 and 12,1 mm.

Progress of the adaptation

1. Insert trial lens for a duration of between 30 minutes and 2 hours. Over refraction (you can use the autorefractometer for getting an idea of cyl/axis).
2. Biomicroscopy (× 10 to 15) white light: observe the lens with patient looking straight ahead and during eye movement.
3. Mobility by eyelid movement, (Push up test).
4. Sag of the lens should be from 1 to 2 mm downwards.
5. Appearance of the front optic zone: tear film, hydration, lubrication, deposit.
6. Keratometry on the contact lens: (deformation of the mires).
7. Check for corneal and conjunctival staining with fluorescein after lens removal.
8. Order the definitive lens on the basis of the SN.