

Tetraflex 1D
Active Lifestyle Lens

Bi-Aspheric • Quarter Diopter TM

Surgeon's Manual



**LENS
TEC** 

Step-By-Step Using The Tetraflex HD™ Safely and Effectively



Figure 1: Capsulorhexis

Creating the Continuous Circular Capsulorhexis (CCC)

- A 5.0—5.5 mm round CCC is ideal. (Fig. 1)
- Reminder: CCCs tend to be made slightly larger
- A slightly oval rhexis does not mean The Tetraflex HD™ cannot be implanted.

The Tetraflex HD™ will need to be implanted in the short axis to allow for maximum optic and haptic coverage thereby reducing the possibility of the optic-haptic junction tilting anteriorly.



Figure 2: Polishing Anterior Capsule

Cleaning/Polishing of the Anterior and Posterior Capsule

- Diligently clean all visible cells from the anterior leaflet with the irrigation/aspiration (I/A) tip in low aspiration or the capsule polishing mode. The use of bi-manual I/A makes it easier and faster to do a full 360 degree cleaning. Spending an extra minute or two cleaning/polishing the anterior and posterior capsule is time well spent. (Fig. 2)

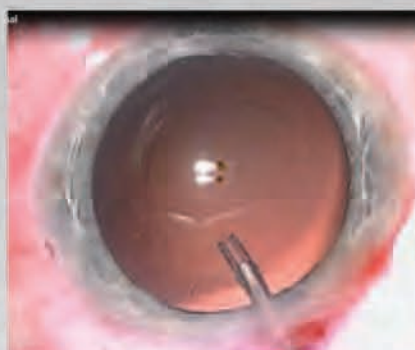


Figure 3: Polishing Posterior Capsule

- Polishing of the posterior capsule is highly recommended with a polisher of your choice. A silicone tipped cannula is very efficient and safe. (Fig. 3)

Note: Take extra care and time with the high myopes and posterior polar cataracts since they will tend to have a thinner capsule



Figure 4: Proper Tetraflex HD™ orientation

IOL Selection

The addition of the shorter length lens is an added benefit for the higher power lenses. This shorter length avoids any buckling or tilting in the high hyperopes.

Loading The Tetraflex HD™

- Carefully place the silicone sleeve over the end of the injector plunger.
- If using disposable forceps, try to avoid touching the optic since these instruments may leave metallic debris on the optic surface.
- Open the cartridge and lubricate the nozzle and loading deck with BSS.

DO NOT USE VISCOELASTIC

- With the cartridge nozzle to your left, place The Tetraflex HD™ on the loading deck with the positioning tab to your distal left (Fig. 4). Using the loading fork, press on the optic and slowly lift on the cartridge wings as if you were to close the cartridge. Make sure that the optic and the haptics are tucked under the edges of each channel. Once you are sure the optic and the haptics are under the edge, close the cartridge completely.



Figure 5: Delivery of The Tetraflex HD™

- Gently advance the lens forward by using the Lens Loader II. If you feel too much resistance, open the cartridge to ensure that the optic and/or the haptics are not trapped in the cartridge wings. Then repeat the loading procedure if necessary.
- Place the loaded cartridge in the injector and apply a small amount of viscoelastic to the silicone tip. Advance the plunger to the IOL.
- Place the nozzle of the cartridge in the eye so that the tip is near the center of the pupil, then slowly and continuously advance the leading haptics until approximately 1/3 to 1/2 of the optic is out of the cartridge tip. Slowly pull the cartridge out of the eye and maintaining slight pressure on the plunger to advance the remaining IOL. Advance the plunger to the point that the silicone sleeve is to the cartridge tip, not past it and out of the cartridge. Since there is less resistance while injecting the remaining lens, be aware that the IOL will often slowly advance itself and adding too much pressure may cause the lens to advance more quickly than preferred. (Fig. 5)

Positioning The Tetraflex HD™

- During the lens delivery, the IOL may bend posteriorly. This may occur due to the softness and flexibility of the haptics. This is not a cause for concern. If this does happen, slowly and gently proceed with the delivery. If the trailing haptics are delivered into the sulcus or above the iris, the lens can easily be manipulated to the desired location with a second instrument of your choice. (Fig. 6)
- If the lens was accidentally loaded or injected upside down, due to flexibility of The Tetraflex HD™, it can be flipped to the side by inflating the bag and Anterior Chamber (AC) with viscoelastic.
- The lens/haptics position very nicely and easily with a non-cohesive viscoelastic.
- You can manipulate the lens easily prior to the removal of viscoelastic. Gently tease the lens back and forth, pulling it out of the fornix with instrument of choice.
- Removing the viscoelastic from behind the lens is easily done with the I/A tip since The Tetraflex HD™ has a 5 degree vault. Lifting the optic anteriorly with the I/A, evacuate all viscoelastic from behind the lens. Once the viscoelastic is removed, The Tetraflex HD™ will tend to position itself with the following technique:
 - Using the inflow of the I/A tip with little aspiration to fill the Anterior Chamber (AC), the lens often settles automatically into its own "preferred" position or may be manipulated to the "surgeon preferred" position.
 - Any IOL position is acceptable, but the lens often settles in an oblique position of superonasal and inferotemporal.

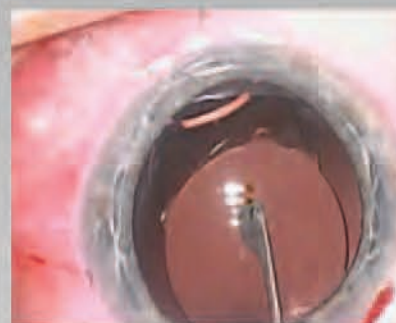


Figure 6: Lens Positioning

Final Positioning of The Tetraflex HD™

- Once The Tetraflex HD™ is in position, proceed by sealing the incisions with Balanced Salt Solution (BSS). Use the following steps to ensure the IOL is perfectly in place. This is especially important, and of great value, in cases with smaller pupils where the haptics are not easily visible or the rhexis may not be of optimal size or shape.

- Inflate through the side port until the optic and haptics are "flat", no vault. Then slowly inflate a little more to create a "posterior bowing" of the optic
- If the "posterior bowing" is symmetrical and the optic or optic-haptic junction does not tilt sideways, you know the IOL is positioned in the bag at its most desired position.
- Slowly release the fluid through the side port until the optic bows forward, leaving the eye slightly softer than normal.
- If during the inflation phase where instances of severe buckling or tilting is noted, rotate the lens to another axis where the buckling or tilting does not occur. (Fig. 7)

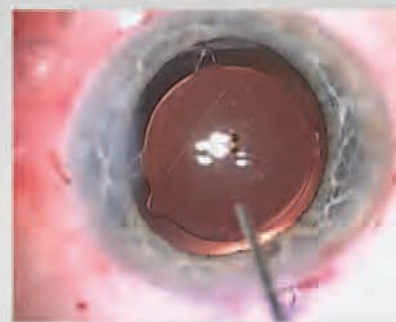


Figure 7: Posterior Capsule Striae



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