

SURGICAL PRACTICE SYSTEM

Training Guide

The Surgical Practice System gives you a realistic surgical experience so you can perfect the latest techniques in corneal transplantation. For additional resource and detailed video tutorials, visit eversightvision.org/sps.

Included supplies:

- Barron artificial anterior chamber (AAC)
- Latex iris
- Seating block
- Tying forceps
- 15ml BSS
- 3ml syringe (x2)
- 26g cannula
- Drape
- Gauze
- Surgical spears
- Surgical marker

Procedure

1. Fill one 3ml syringe with BSS.
Option: Fill second 3ml syringe with air.
2. Connect the 3mL syringe with BSS to the AAC's luer lok.
Option: Attach second syringe to the AAC and close the luer lok.
3. Disassemble the AAC.
 - 3.1 Remove the locking ring by twisting until loose and lifting up.
 - 3.2 Directly lift the tissue retainer to remove it from the tissue pedestal.
4. Using forceps remove the cornea from the viewing chamber and position on the seating block, epithelial side down.
 - 4.1 Connect the 26g cannula to the 15ml bottle of BSS.
 - 4.2 Add drops of BSS to fill the corneal well (up to/just over the limbus).
 - 4.3 Gently grasp the latex iris using forceps with the pupil facing down.

Continued on next page

Barron Artificial Anterior Chamber



Locking Ring



Tissue Retainer



Base

SURGICAL PRACTICE SYSTEM

Training Guide

- 1.1 Position the iris over the endothelium by starting on one side of the sclera and slowly lowering across the cornea until the iris is in contact with BSS 360° (motion is similar to returning a DMEK graft back to the stroma after partial stripping). The latex iris will have a slightly darker color when in contact with the BSS. This is to prevent bubbles from forming in the anterior chamber.
 - 1.2 Lightly press down the edges of the latex iris to form a seal along the corneoscleral disc with the forceps.
1. Mount the cornea on the AAC
 - 1.1 Slowly depress the BSS syringe to fill the tissue pedestal well.
 - 1.2 Invert the tissue retainer and hold in non-dominant hand.
 - 1.3 Utilizing a pair of forceps remove the cornea from the seating block.
 - 1.4 Position the cornea endothelial-side-up into the inverted tissue retainer and center.
 - 1.5 Return the tissue retainer to the correct orientation (epithelial-side-up) to check centration, adjust as needed.
 - 1.6 Place the tissue retainer on the tissue pedestal by fitting the two bottom subassembly pegs into the tissue retainer.
 - 1.7 Place the locking ring over the tissue retainer, twist to lock into position.
 - 1.8 Gently depress the BSS syringe to pressurize the AAC (takes very small amount of BSS).
Note: Pressurizing the AAC too much can lead to loss of BSS in the anterior chamber resulting in the latex iris adhering to the endothelium. To fix an adhered latex iris, dismount the cornea and repeat steps 4-5.
 2. Using a wet surgical spear, remove the epithelium for better visualization.



**Download resources
and view detailed
instructional videos at
eversightvision.org/sps.**