TITRATABLE GONIOTOMY + OVD DELIVERY WITH STREAMLINE®

Two surgeons share their experience.

BY *GLAUCOMA TODAY*

The best approaches to restoring the natural order of biologic systems is to restore natural function with minimal footprint left behind. The STREAMLINE® Surgical System (New World Medical) aims to fit seamlessly into your surgical routine and provide a robust and intuitive option for your patients. Nathan M. Radcliffe, MD, a glaucoma specialist at New York Eye Surgery Center in New York comments, "STREAMLINE represents the next step in microincisional surgery, in that the instrumentation is truly micro, with engineering that sets it apart."

STREAMLINE facilitates precise goniotomy and catheterization of the canal of Schlemm to target the essential structures in the conventional outflow system. Using ClickPulse® technology, the surgeon uses STREAMLINE to open multiple incisional goniotomies while injected ophthalmic viscosurgical device (OVD) dilates the canal, stretches the trabecular meshwork (TM), and flushes the distal collector channels over several clock hours in one unified step. Dr. Radcliffe comments, "In this case, the clever design allows the surgeon to create a precise goniotomy that is very gentle to the TM. Even though the cannula is microns in diameter, it is able to access the canal of Schlemm while delivering an effective amount of OVD through dual sideports to expand several millimeters of the conventional outflow system."

Ranjan P. Malhotra, MD, FACS, a cornea specialist in St. Louis, agrees that the STREAMLINE procedure offers many advantages. He states, "Since the STREAMLINE creates such a precise opening, there is less chance for encountering collateral tissues compared to other goniotomy approaches, and I can titrate it as needed for the individual patient. This is very appealing because when I combine this procedure with cataract surgery, there are very few side effects."

PERFORMING STREAMLINE

Once the STREAMLINE Surgical System is primed with OVD, the outer sleeve is inserted into the anterior chamber through the existing clear corneal cataract incision and advanced past the pupil toward the opposite angle. "It is very straight forward; the mechanics of the device do most of the work for you," states Dr. Radcliffe. "You advance the device just until it is putting a forward bias against the TM. Then you activate the ClickPulse technology. Moving 1 to 2 clock hours from the initial application site, this procedure can be repeated multiple times to address many clock hours of the conventional outflow system."

Dr. Malhotra expands on the ability to titrate the treatment stating, "Depending on the needs of the patient, I can choose to perform up to eight ClickPulse applications based on what I feel the patient requires. I have done as few as two and as many as eight, with three to four being appropriate for most patients. Since you can choose to not make large openings, the control by the surgeon is optimized. Furthermore, I am not leaving a foreign body behind, which makes STREAMLINE an appealing choice for many of my patients who are also undergoing cataract extraction with premium lens implantation."

Like with any angle procedure, good visualization is important. Dr. Malhotra describes his technique when performing the STREAMLINE procedure. "When sitting temporally, I tilt the patient's head away from me and tilt the microscope 30° toward me. I like to align the blue outer sleeve—toward the anterior one-third of the TM–to allow for optimal centration of the inner cannula over the canal of Schlemm once I depress the actuator button. I support the device from underneath to provide more stability. Whether performing STREAMLINE in conjunction with cataract surgery or standalone, it is important to position the head and get good visualization of the angle."

VERSATILITY

STREAMLINE is suitable to being performed as a standalone procedure or in conjunction with cataract surgery.

"One other key area of versatility is the ability to not only titrate the number of goniotomies performed but also titrate the size of the goniotomies," says Dr. Radcliffe. "Depending on the patients' needs and what I am trying to accomplish, the design of the inner cannula allows me to extend any of the original incisional goniotomies by directing the tip from side to side to the desired length." With STREAMLINE® leave only your best work behind. ■

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