

# Perspectives on Canaloplasty

BY MARK KONTOS, MD

The field of glaucoma is undergoing a surgical renaissance with the development of new shunts and stents and rapidly evolving surgical techniques such as canaloplasty. In this installment of “Inside Eyetube.net,” experienced canaloplasty surgeons discuss how the procedure has increased their surgical volume and its benefits in terms of postoperative management. They also share tips for navigating the learning curve for this procedure as well as discuss how patients benefit from the simplified postoperative course. This article begins, however, with a step-by-step video of the canaloplasty procedure.

## THE PROCEDURE IN FIVE STEPS

Michael Morgan, MD, demonstrates a five-step approach to successfully performing canaloplasty. During the case presentation, Dr. Morgan offers pearls for creating the outer flap, creating the inner flap and Descemet window (Figure 1), performing dilation and catheterization with the iTrack 250A microcatheter (iScience Interventional), placing the suture and applying tension (Figure 2), and making a watertight closure.

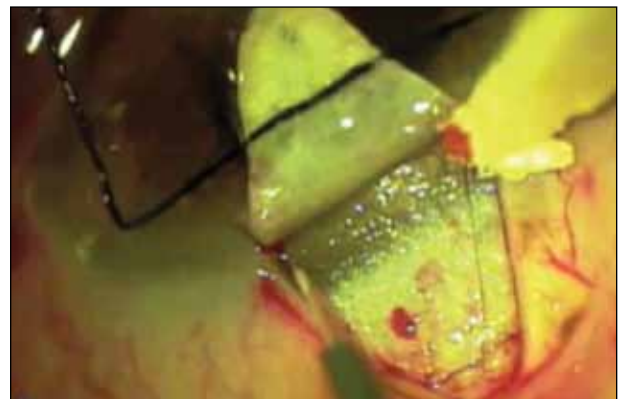


Figure 1. Dr. Morgan outlines a deep scleral flap with a mini diamond knife and positions the incision 0.5 mm from the outer edge to facilitate a watertight closure.

## BUILD YOUR SURGICAL PRACTICE

The surgeons in this video have experienced an increase in their glaucoma surgical volume since adding canaloplasty to their practices. For Regine Pappas, MD, offering canaloplasty resulted in a 25% increase in glaucoma surgical volume. Dr. Morgan says that, with this procedure as an option, his patient population for glaucoma surgery has expanded, and he feels comfortable recommending it to many of his patients. With canaloplasty, Dr. Morgan says he is able to intervene earlier than with trabeculectomy and reduce the number of medications his patients need



Figure 2. Dr. Morgan creates a slipknot by not crossing forceps and maintaining tension on both sides of the suture while tightening it.

to take. Dharmendra “Dave” Patel, MD, has found that his patients are so pleased with their outcomes that many of them request canaloplasty for their fellow eye. This, he said, has been the No. 1 driver for him to perform more glaucoma surgery at his practice.

## POSTOPERATIVE MANAGEMENT

Adam Reynolds, MD, and Dr. Pappas agree that managing patients postoperatively is less intense after canaloplasty than after trabeculectomy. Dr. Reynolds says that he sees his canaloplasty patients postoperatively about one-third as often as he does trabeculectomy patients. His patients reportedly experience less discomfort after canaloplasty, and he has fewer unscheduled visits. Postoperatively, Dr. Reynolds focuses on managing patients' use of eye drops. For Dr. Pappas, managing patients after canaloplasty is far easier than after trabeculectomy, because she does not need to worry about scar tissue's forming or creating a bleb.



## LEARNING CURVE

Joseph Hsu, MD; Dr. Patel; and Howard Barnebey, MD, discuss their experiences learning how to perform canaloplasty and ultimately becoming comfortable with the procedure. Dr. Hsu recommends performing a lot of surgeries—at least 10—in a short period of time to quickly learn from the challenges and complications that often occur in the early cases.



Practicing canaloplasty in the wet laboratory first is Dr. Patel's advice. Doing so will enforce the surgeon's skill set for trabeculectomy, he says, and help with the transition to canaloplasty. In Dr. Barnebey's view, canaloplasty is often perceived as a difficult procedure to perform, but if a surgeon is committed to and excited about learning the procedure, then he says the level of difficulty is irrelevant.

## CONCLUSION

Canaloplasty can complement traditional glaucoma surgery, and there are numerous benefits associated with incorporating this procedure into a glaucoma practice. As the surgeons in these videos attest, canaloplasty has found a place in the OR of the glaucoma specialist. ■

*Section Editor Elena Albé, MD, is a consultant in the Department of Ophthalmology, Cornea Service, Istituto Clinico Humanitas Ophthalmology Clinic, Milan, Italy.*

*Section Editor Damien F. Goldberg MD, is in private practice at Wolstan & Goldberg Eye Associates in Torrance, California.*

*Section Editor Mark Kontos, MD, is the senior partner at Empire Eye Physicians in Spokane, Washington. He acknowledged no financial interest in the product or company mentioned herein. Dr. Kontos may be reached at (509) 928-8040; mark.kontos@empireeye.com.*

