

Trabeculectomy Glaucoma Surgery After Canaloplasty

"My doctor told me that if I had Canaloplasty I would not be able to have trabeculectomy in the future. Is this true?"

This is one of the most common misconceptions about Canaloplasty. It's also, sadly, one of the more common reasons patients chose not to have Canaloplasty when their glaucoma is severe enough that it requires surgical treatment. Surgeons who do not perform (or only infrequently perform) Canaloplasty may have the impression that trabeculectomy cannot be performed after Canaloplasty. Why would this be so? Well, as a general rule, once you have had surgery on the conjunctiva it is technically more challenging to perform trabeculectomy due to the scarring from prior surgery. Even if the surgery can be successfully performed, trabeculectomies after prior eye surgery are more likely to fail.

As Canaloplasty is performed by creating a conjunctival flap in the area of the eye commonly used for other glaucoma surgeries, it's reasonable for surgeons who have little experience with Canaloplasty to assume that trabeculectomy would also be difficult or prone to failure after Canaloplasty.

From Experienced Canaloplasty surgeons...

Experienced Canaloplasty surgeons, however, have been aware for years that the conjunctiva in the area of prior Canaloplasty has a very normal appearance with minimal scarring. This is very different than the expected conjunctival scarring seen after other glaucoma, retinal or older style cataract surgeries. Among experienced Canaloplasty surgeons it has also been accepted that Canaloplasty does not limit a skilled surgeon's ability to perform either a trabeculectomy or placement of a tube implant (Ahmed, Baerveldt, or Molteno) in the area of prior Canaloplasty surgery. Unfortunately, this was considered hearsay by most glaucoma surgeons with little or no experience with Canaloplasty.

The Evidence...

In 2014 at the European Glaucoma Society Congress Drs. Paolo Brusini and Claudia Tosoni presented evidence that trabeculectomy can successfully be performed after Canaloplasty. They evaluated the results of 24 trabeculectomies performed after Canaloplasty and compared the results to 24 patients who had "primary trabeculectomy". The results were similar in both groups. Average IOP 12 months after surgery in the "trabeculectomy after Canaloplasty" group was 14.4mmHg whereas in the "primary trabeculectomy" group it was 14.8mmHg (the difference was not statistically significant).

Finally, there is evidence to support what experienced Canaloplasty surgeons have known for years. More importantly, well-informed patients will no longer choose trabeculectomy over Canaloplasty due to unfounded fears of not being able to have additional glaucoma surgery if needed in the future. Most patients who are candidates for trabeculectomy are also good candidates for Canaloplasty. Nevertheless, there are legitimate reasons why some patients should have trabeculectomy rather than Canaloplasty. Unfounded fear, however, should not be one of those reasons.