Laser Treatment for Glaucoma: Newer Procedures

Dieudonne Kaimbo Wa Kaimbo*
Ophthalmology and Biophysics, University of Kinshasa Democratic, Republic of Congo

Trabeculectomy with Mitomycin-C (MMC) and glaucoma drainage device implantation remain the most commonly performed surgical procedures for the treatment of Open Angle Glaucoma (OAG). Numerous studies have shown good efficacy for these surgical procedures [1-3]; however, a high rate of complications [4] has prompted the glaucoma community to search for alternative surgeries to treat OAG.

There is a trend towards using lasers earlier in the course of treatment of open-angle glaucoma [5]. From the patient and physician perspectives, laser therapy is less invasive and more easily performed than most incisional ophthalmic surgeries. When successful, glaucoma laser therapy is also remarkably cost-effective. Lastly, though not to be minimized, complications following glaucoma laser therapy tend to be less serious and more easily treated [6]. A variety of glaucomatous pathologic processes may be addressed employing photocoagulation and photodisruption, the major modalities of laser energy application. Traditional procedures include Argon Laser Trabeculoplasty, Argon iridoplasty, Peripheral Laser Iridotomy, and Cyclophotocoagulation. Newer procedures include selective YAG Laser Trabeculoplasty, endoscopic cyclophotocoagulation, YAG Transconjunctival Laser Revision of Late Failing filters and excimer laser trabeculotomy.

Glaucoma specialists continue to look for "blebless" surgical techniques with which to treat patients whose medications have failed them. The increasing use of selective laser trabeculoplasty and endoscopic cyclophotocoagulation reflects this trend. Research into excimer laser trabeculotomy, an ab interno approach to drainage, is also reflective of this movement. As interest increases in blebless procedures, it is highly possible that lasers will play an increasing role in surgical management.

References

*Corresponding author: Dieudonne Kaimbo Wa Kaimbo, Ophthalmology and Biophysics, University of Kinshasa Democratic, Republic of Congo, E-mail: dieudonne_kaimbo@yahoo.com

Received October 21, 2013; Accepted October 23, 2013; Published October 25, 2013


Copyright: © 2013 Kaimbo DKW. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.