Types Of Laser Trabeculoplasty (LT)

There are three types of lasers currently used for trabeculoplasty glaucoma surgery: Argon, “Selective”, and Micropulse.

Argon Laser Trabeculoplasty (ALT)

This type of laser has been around the longest. It is generally performed in one or two sessions. However, it can result in microscopic scars called “peripheral anterior synechiae”\(^1\) that can limit the effectiveness of the treatment as well as future surgeries (such as canaloplasty).

Selective Laser Trabeculoplasty (SLT)

Selective Laser Trabeculoplasty (SLT) was first reported in 1995.\(^2\) It uses a “Q-switched, frequency-doubled Nd:YAG laser”. This laser energy is preferentially absorbed by the pigment-containing cells in the trabecular meshwork while cells without pigment are left undamaged.\(^3\) Because SLT does not “coagulate” (or melt) tissue this results in a less traumatic laser treatment compared to ALT.\(^4\)

SLT appears to cause less damage to the eye tissue and uses less than 1% of the energy required for ALT.\(^5\) It is rapidly
becoming the preferred method of laser surgery (over ALT) for treating primary open angle glaucoma. It can also be performed on patients who have already had received a full treatment of ALT.\footnote{6}

**Micropulse Laser Trabeculoplasty (MLT)**

Micropulse Diode Laser Trabeculoplasty (MDLT or MLT) is the latest addition to the Laser Trabeculoplasty party. MLT works by using very short bursts of the laser (called “micro-pulses”) to heat up the trabecular meshwork cells without destroying them. This avoids the damage and scarring associated with ALT while minimizing the inflammation and post-operative IOP elevations seen with both ALT and SLT.\footnote{7}

CONTINUE READING...

How Well Does Laser Trabeculoplasty (LT) Work?

Don’t delay getting checked for glaucoma. Make an appointment with an eye doctor in your area now. If you live in the greater Los Angeles area and would like Dr. Richardson to evaluate your eyes for glaucoma call 626-289-7856 now. Same day or next day appointments are available Tuesday through Saturday.

**References:**


Comments

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