



Glaucoma Treatment: Selective Laser Trabeculoplasty, or SLT

The Procedure

This is an out patient laser surgery that is used to lower intraocular pressure in glaucoma. It is used when eye drop medications are not lowering the eye pressure enough or are causing significant side effects. SLT has been performed for over 10 years in the United States and around the world. Laser energy is applied to the drainage tissue in the eye. This starts a chemical and biological change in the tissue that results in better drainage of fluid through the drain and out of the eye. This eventually results in lowering of eye pressure. It may take 1-3 months for the results to appear. There is minimal discomfort with this laser.

Success

SLT lowers the IOP by about 30% when used as initial therapy. The effect will generally last between 1-5 years, and in rare cases, longer than that. If it does not last at least 6-12 months, it is usually not considered successful and can be repeated. But the second treatment may not be as effective as the first and may not last as long. If SLT fails to lower the IOP, then the glaucoma is treated by other means such as medications or conventional surgery. The laser does not affect the success of these other types of treatment. Just as some patients will require more than one glaucoma medication to control their IOP, some may also require laser plus one or more glaucoma medications. It is important to remember that SLT is not a cure for glaucoma, just as medication and surgery are not. Whatever method is used to treat glaucoma, appropriate follow up and testing with your eye care professional is critical.

Recovery

Unlike the trabeculectomy procedure where the eye recovers very slowly, it can take several weeks for the eye to respond to SLT . Although it is very unusual, complications can occur, bleeding inside the eye, and increased IOP after the laser.