

Long-Term Control of Adult Open Angle Glaucoma by Argon Laser Treatment

JAMES B. WISE, MD

Abstract: Uncontrolled adult open angle glaucoma was treated with a new argon laser technique in which 100 spots are applied 360 degrees around the trabecular meshwork. The average pressure drop was 12.7 mm Hg in 105 eyes at one year, 11.5 mm Hg in 59 eyes at two years, 11.3 mm Hg in 25 eyes at three years, and 13.3 mm Hg in 11 eyes at four years. Only 6% of the eyes required additional surgery. The rate of control was equivalent to trabeculectomy, but with far fewer complications. Control in blacks and in patients over age 70 was better (91%) than with surgical procedures. Microscopic examination of two controlled eyes showed no trabecular punctures. The laser microscars reduce the diameter of the trabecular ring, tightening the meshwork, and restoring function to the normal outflow systems. [Key words: argon laser photocoagulation, glaucoma surgery, open angle glaucoma, trabecular meshwork.] *Ophthalmology* 88:197-202, 1981