



Patients with pigmentary glaucoma respond well to laser trabeculoplasty, but steps must be taken to reduce the risk of the IOP spike that may occur immediately after the laser treatment.

The Science behind the Tip

Argon or selective laser trabeculoplasty (LT) is an established therapeutic option in the treatment of patients with pigment dispersion syndrome and pigmentary glaucoma¹⁻³. This treatment is more effective in younger patients than in older patients. There is a greater chance of failure in patients with pigmentary glaucoma who have had the condition longer and in those with higher pre-treatment IOP¹. The effect declines over time (80% control at 1 year, 45% control at 6 years after argon LT)².

A significant concern is the IOP spike that may follow immediately after the laser treatment, presumably secondary to pigment release³. The risk can be reduced by using g.Aproclonidine 1% pre-treatment, by using low laser energy settings and by reducing the number of treatment spots³. These patients should have their IOP checked 2 hours after their procedure.

References

1. M Lieberman MF, Hoskins HD, Hetherington J. Laser trabeculoplasty in pigmentary dispersion syndrome with glaucoma. *Am J Ophthalmol* 1983; 96:721-725.
2. Ritch R, Leibmann J, Robin A et al. Argon laser trabeculoplasty in pigmentary glaucoma. *Ophthalmology* 1993; 100: 909-913.
3. Harasymowycz PJ, Papamatheakis DG, Latina M et al. Selective laser trabeculoplasty (SLT) complicated by intraocular pressure elevation in eyes with heavily pigmented trabecular meshworks. *Am J Ophthalmol* 2005; 139: 1110-1113.