



**Gradual intraocular pressure (IOP) elevation with a need for additional treatment is common in pseudophakic glaucoma patients following Nd: YAG laser posterior capsulotomy**

***The Science behind the Tip***

Nd: YAG laser capsulotomy is known to increase the IOP in some normal patients in the short term, with the maximum IOP elevation occurring within the first two days. This is more likely to occur in patients with glaucoma<sup>1</sup>. The cause is reduced outflow facility and is directly related to the total laser energy delivered<sup>2</sup>.

A delayed rise in IOP has been reported in up to 50% of patients with glaucoma two years after undergoing the procedure<sup>3,4</sup>. The exact cause is unclear. Close monitoring of the IOP is needed for at least two years post laser treatment, after which the IOP tends to stabilise<sup>4</sup>.

***References***

- 1) Steinert RF, Puliafito CA, Kumar SR et al. Cystoid macular edema, retinal detachment and glaucoma after Nd: YAG laser posterior capsulotomy. *Am J Ophthalmol* 1991; 112: 373-80
- 2) Wetzel DW. Ocular aqueous humor dynamics after photodisruptive laser surgery procedures. *Ophthalmic Surg* 1994; 25: 298-302.
- 3) Barnes EA, Murdoch IE, Subramaniam S et al. Neodymium: yttrium – aluminum – garnet capsulotomy and intraocular pressure in pseudophakic patients with glaucoma. *Ophthalmology* 2004; 11: 1393-7
- 4) Lin J-C, Katz LJ, Spaeth GL, Kranchik JM. Intraocular pressure control after Nd: YAG laser posterior capsulotomy in eyes with glaucoma. *Br J Ophthalmol* 2008; 92: 337-9.