Laser peripheral iridotomy can reduce the intraocular pressure in pigment dispersion syndrome, but may not prevent glaucoma

The Science behind the Tip

Nd-YAG laser peripheral iridotomy (PI) eliminates the reverse pressure gradient and intermittent posterior bowing of the peripheral iris in individuals with pigment dispersion syndrome\(^1\). In patients under the age of 40 years, this can lead to a reduction in intraocular pressure (IOP) in time.

Gandolfi et al. reported that after 2 years of follow-up, one treated eye (4.7%), compared with 11 untreated eyes (52.3%), demonstrated an IOP elevation of more than 5 mmHg\(^2\). A subsequent retrospective audit undertaken by members of the American Glaucoma Society was inconclusive on the benefit of PI in the long-term IOP control of patients with pigmentary glaucoma\(^3\). However, in a recent prospective randomised controlled trial of 116 patients with pigment dispersion syndrome followed for 3 years, laser PI did not prevent the development of pigmentary glaucoma\(^4\). A longer period of follow-up is needed before this result can be considered conclusive.

References