In patients with pseudoexfoliation glaucoma, phacoemulsification with IOL implantation can result in a late, sustained reduction in intraocular pressure.

The Science behind the Tip

Raised intraocular pressure (IOP) in an eye with pseudoexfoliation syndrome results from pigment and exfoliation material in the trabecular meshwork reducing aqueous outflow. In unilateral disease, the eye with pseudoexfoliation almost always develops a cataract before the fellow eye, presumably as a consequence of low ascorbate levels in the anterior chamber of these individuals. Removing the cataract can result in a late, sustained reduction in IOP, possibly as a consequence of reduced irido-lenticular touch and a reduction in debris in the trabecular meshwork.

The higher the preoperative IOP the greater the reduction in postoperative IOP. The IOP-lowering effect has been related to the volume of irrigation fluid used at the time of surgery. When the phacoemulsification is combined with aspiration of material from the trabecular meshwork an average reduction of 14 mmHg at 2 years has been reported. The beneficial effect can last up to 7 years.

References


Contributor: John Salmon, Oxford