Summary

Primary angle closure glaucoma is a leading cause of blindness and is potentially preventable.

The lens plays an essential and pivotal role in the pathogenesis of primary and secondary ACG. Clinical studies suggest that lensectomy and PCIOL implantation for ACG patients may offer successful IOP control, and maintenance of improved vision. Lensectomy eliminates papillary block, widens the angle to lessen angle crowding thus reducing the iridotrabecular proximity, and is the only treatment alternative that reduces if not corrects the responsible anatomic predisposition to angle closure. Medical management and LPI remain the most common modes of treatment of an acute attack but newer approaches including early lens removal are gaining popularity because of their potential long-term success in IOP control. Uncertainty persists as to when after an acute attack although lens extraction for angle closure is biologically plausible, as of this time, there is no evidence from good quality randomized trials or non-randomized studies of the effectiveness of lens extraction for CACG.

More longitudinal biomorphometrical studies of PACG eyes treated with and without lensectomy are needed to determine its role in the prevention of progressive angle closure and to determine which patients will benefit from lens extraction

Limited goniosynechialysis combined with phacoemulsification and posterior chamber IOL implantation, may have a role in the surgical treatment of patients with ACG with total synechial angle closure and cataract, who have increased IOP for up to 12 months. We have also shown that removal of the cataractous lens alone cannot open an angle that is permanently closed by PAS. Goniosynechialysis opens the synechially closed angle mechanically.