



Chronic miotics can be helpful in case of plateau iris configuration

The Science behind the Tip

Long term miotics are seldom prescribed nowadays. Still the drugs remain useful in case of plateau iris configuration, a rare condition where, in the absence of pupil block, the peripheral iris contour lies abnormally close to the trabecular meshwork. When the pupil dilates, iris tissue can be pushed against it, closing the angle. Because this is not directly tied to resistance to flow of aqueous through the pupil, yag laser iridotomy (YIR) alone is insufficient to prevent acute angle-closure glaucoma. Chronic pilocarpine therapy can be effective in these cases¹. It works by thinning the iris. In addition, the pilocarpine can prevent formation of peripheral anterior synechiae (PAS) and chronic-angle closure in the long-term². In order to minimize side-effects, a dilution of the pilocarpine up to a 0.1% solution can be tried, and the patient can be advised to briefly interrupt the treatment from time to time to avoid posterior synechiae.

The diagnosis of plateau iris configuration can be missed at the slit-lamp when axial anterior chamber depth is normal. It suggests itself when symptoms of subacute angle-closure persist after YIR. Indentation gonioscopy can separate iris proximity from PAS. Gonioscopy in a darkened room to look for iridotrabecular apposition after YIR is key. Modern anterior chamber imaging techniques, if available, may help in the diagnosis.

In case of intolerance to pilocarpine or residual appositional closure, argon laser peripheral iridoplasty can be used to shrink and flatten the peripheral iris, but follow-up with periodic gonioscopy remains mandatory as retreatment may be necessary^{1,2}.

References

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2. Savage JA. Primary Angle-Closure, p83-5, p102-3. In: Clinical pathways in Glaucoma. Ed: Zimmerman and Kooner. Thieme Medical Publishers, New York, 2001.