



Screening for angle-closure is a necessary step in each routine examination

The Science behind the Tip

Angle-closure glaucoma represents about one fourth of the glaucomas in the world and causes nearly half of all glaucoma blindness. It is asymptomatic in up to 75% of cases¹. Pupillary block is the most common mechanism of angle-closure². Known risk factors for pupillary block are older age, female gender, Asian ancestry, narrower drainage angles, smaller anterior segment dimensions, and a thicker and more anteriorly positioned lens. There is however no parameter proven to be sufficiently sensitive to determine whether acute angle-closure will occur³.

In this context, angle-closure risk evaluation should be performed routinely in all adults undergoing an examination whatever their age or complaints. This holds especially true if they have an abovementioned risk factor, a positive family history of glaucoma, symptoms of subacute intermittent episodes of angle-closure, or when they take α -sympathomimetic or parasympatholytic drugs³.

Evaluation of the limbal anterior chamber depth (*Van Herick technique*), and static and dynamic gonioscopy are key^{2,3}. Given its low risk, prophylactic laser iridotomy is indicated whenever there is a high risk for angle-closure. This corresponds to a positive *Van Herick* test and net convexity of the iris in the examined subject on gonioscopy, associated with the presence of iridotrabecular contact over 270° or more in primary gaze³.

References

1. Foster P *et al.* Angle Closure and Angle Closure Glaucoma. Edited by R. Weinreb. Kruger publications, The Hague, The Netherlands, 2006: 1-20.
2. Shields' Textbook of Glaucoma. Fifth Edition 2005; ch 12: 217-34.
3. Friedman DS *et al.* Angle Closure and Angle Closure Glaucoma. Edited by R. Weinreb. Kruger publications, The Hague, The Netherlands, 2006: 55-63.