



April 2007

International Council of Ophthalmology/  
International Federation of Ophthalmological Societies

## ICO International Clinical Guidelines

# Primary Open-Angle Glaucoma Suspect (Initial and Follow-up Evaluation)

**(Ratings:** A: Most important, B: Moderately important, C: Relevant but not critical  
**Strength of Evidence:** I: Strong, II: Substantial but lacks some of I, III: consensus of expert opinion in absence of evidence for I & II)

### Initial Exam History (Key elements)

- Ocular history (A:III)
- Systemic history (A:III)
- Family history (A:III)
- Review of pertinent records (A:III)
- Assessment of impact of visual function on daily living and activities (A:III)

### Initial Physical Exam (Key elements)

- Visual acuity (A:III)
- Pupils (B:II)
- Slit-lamp biomicroscopy of anterior segment (A:III)
- Measurement of IOP (A:I)
- Central corneal thickness (A:II)
- Gonioscopy (A:III)
- Evaluation of optic nerve head and retinal nerve fiber layer, with magnified stereoscopic visualization (A:III)
- Documentation of the optic disc morphology, best performed by color stereophotography or computer-based image analysis (A:II)
- Evaluation of the fundus (through a dilated pupil whenever feasible) (A:III)
- Visual field evaluation, preferably by automated static threshold perimetry (A:III)

Jean-Jacques DeLaey, MD, Secretary General  
Department of Ophthalmology, Ghent University Hospital, de Pintelaan 185, B-9000  
Ghent, Belgium

Fax: (+32-9) 240-49-63 E-mail: [info@icoph.org](mailto:info@icoph.org) Web: [www.icoph.org](http://www.icoph.org)

# ICO International Clinical Guidelines: Primary Open-Angle Glaucoma Suspect (Initial and Follow-up Evaluation)

Page 2

## Management Plan for Patients in Whom Therapy is Indicated:

- An appropriate initial goal is to set target pressure 20% less than mean of several IOP measurements and  $\leq 24$  mm Hg. (A:I)
- Choose regimen of maximal effectiveness and tolerance to achieve desired therapeutic response. (A:III)

## Follow-Up Exam History

- Interval ocular history (A:III)
- Interval systemic medical history and any change of systemic medications (B:III)
- Side effects of ocular medications if patient is being treated (A:III)
- Frequency and time of last glaucoma medications, and review of use, if patient is being treated (B:III)

## Follow-Up Physical Exam

- Visual acuity (A:III)
- Slit-lamp biomicroscopy (A:III)
- IOP and time of day measurement (A:III)
- Gonioscopy is indicated when there is a suspicion of an angle-closure component, anterior chamber shallowing or unexplained change in IOP (A:III)

## Recommended Guidelines for Follow-up [A:III]

Treatment	Target IOP Achieved	High Risk of Damage	Follow-up Interval	Frequency of Optic Nerve Head and Visual Field Evaluation
No	N/A	No	6-24 months	6-24 months
No	N/A	Yes	3-12 months	6-18 months
Yes	Yes	Yes	3-12 months	6-18 months
Yes	No	Yes	$\leq 4$ months	3-12 months

## ICO International Clinical Guidelines: Primary Open-Angle Glaucoma Suspect (Initial and Follow-up Evaluation)

Page 3

### Patient Education for Patients with Medical Therapy:

- Discuss number and severity of risk factors, prognosis, management plan and likelihood that therapy, once started, will be long term. **(A:III)**
- Educate about disease process, rationale and goals of intervention, status of their condition, and relative benefits and risks of alternative interventions. **(A:III)**
- Educate about eyelid closure and nasolacrimal occlusion when applying topical medications to reduce systemic absorption. **(B:II)**
- Encourage patients to alert their ophthalmologist to physical or emotional changes that occur when taking glaucoma medications. **(A:III)**

\* Adapted from the [American Academy of Ophthalmology Summary Benchmarks, November 2006 \(www.aao.org\)](http://www.aao.org)

(For more ICO International Clinical Guidelines, see [www.icoph.org/guide](http://www.icoph.org/guide))

---

### Preface to the Guidelines:

International Clinical Guidelines are prepared and distributed by the International Council of Ophthalmology on behalf of the International Federation of Ophthalmological Societies.

These Guidelines are to serve a supportive and educational role for ophthalmologists worldwide. These guidelines are intended to improve the quality of eye care for patients. They have been adapted in many cases from similar documents (Benchmarks of Care) created by the American Academy of Ophthalmology based on their Preferred Practice Patterns.

While it is tempting to equate these to Standards, it is impossible and inappropriate to do so. The multiple circumstances of geography, equipment availability, patient variation and practice settings preclude a single standard.

Guidelines on the other hand are a clear statement of expectations. These include comments of the preferred level of performance assuming conditions that allow the use of optimum equipment, pharmaceuticals and/or surgical circumstances.

Thus, a basic expectation is created and if the situation is optimum, the optimum facets of diagnosis, treatment and follow up may be employed. Excellent, appropriate and successful care can also be provided where optimum conditions do not exist.

Simply following the Guidelines does not guarantee a successful outcome. It is understood that, given the uniqueness of a patient and his or her particular

## **ICO International Clinical Guidelines: Primary Open-Angle Glaucoma Suspect (Initial and Follow-up Evaluation)**

Page 4

circumstance, physician judgment must be employed. This can result in a modification in application of a guideline in individual situations.

Medical experience has been relied upon in the preparation of these guidelines, and they are whenever possible, evidence-based. This means these Guidelines are based on the latest available scientific information. The ICO is committed to provide updates of these guidelines on a regular basis (approximately every two to three years).

(Also see the Introduction to the ICO International Clinical Guidelines at [www.icoph.org/guide/guideintro.html](http://www.icoph.org/guide/guideintro.html) and the list of other Guidelines at [www.icoph.org/guide/guidelist.html](http://www.icoph.org/guide/guidelist.html).)