

The Eye M.D. Association

PRIMARY OPEN-ANGLE GLAUCOMA SUSPECT SUMMARY BENCHMARKS FOR PREFERRED PRACTICE PATTERN® GUIDELINES

Introduction:

These are summary benchmarks for the Academy's Preferred Practice Pattern® (PPP) guidelines. The Preferred Practice Pattern series of guidelines has been written on the basis of three principles.

- Each Preferred Practice Pattern should be clinically relevant and specific enough to provide useful information to practitioners.
- Each recommendation that is made should be given an explicit rating that shows its importance to the care process.
- Each recommendation should also be given an explicit rating that shows the strength of evidence that supports the recommendation and reflects the best evidence available.

Preferred Practice Patterns provide guidance for the pattern of practice, not for the care of a particular individual. While they should generally meet the needs of most patients, they cannot possibly best meet the needs of all patients. Adherence to these Preferred Practice Patterns will not ensure a successful outcome in every situation. These practice patterns should not be deemed inclusive of all proper methods of care or exclusive of other methods of care reasonably directed at obtaining the best results. It may be necessary to approach different patients' needs in different ways. The physician must make the ultimate judgment about the propriety of the care of a particular patient in light of all of the circumstances presented by that patient. The American Academy of Ophthalmology is available to assist members in resolving ethical dilemmas that arise in the course of ophthalmic practice.

The Preferred Practice Pattern® guidelines are not medical standards to be adhered to in all individual situations. The Academy specifically disclaims any and all liability for injury or other damages of any kind, from negligence or otherwise, for any and all claims that may arise out of the use of any recommendations or other information contained herein.

For each major disease condition, recommendations for the process of care, including the history, physical exam and ancillary tests, are summarized, along with major recommendations for the care management, follow-up, and education of the patient. For each PPP, a detailed literature search of PubMed and the Cochrane Library for articles in the English language is conducted. The results are reviewed by an expert panel and used to prepare the recommendations, which they rated in two ways.

The panel first rated each recommendation according to its importance to the care process. This "importance to the care process" rating represents care that the panel thought would improve the quality of the patient's care in a meaningful way. The ratings of importance are divided into three levels.

- Level A, defined as most important
- Level B, defined as moderately important
- Level C, defined as relevant but not critical

The panel also rated each recommendation on the strength of evidence in the available literature to support the recommendation made. The "ratings of strength of evidence" also are divided into three levels.

- Level I includes evidence obtained from at least one properly conducted, well-designed randomized controlled trial. It could include meta-analyses of randomized controlled trials.
- Level II includes evidence obtained from the following:
 - Well-designed controlled trials without randomization
 - Well-designed cohort or case-control analytic studies, preferably from more than one center
 - Multiple-time series with or without the intervention
- Level III includes evidence obtained from one of the following:
 - Descriptive studies
 - Case reports
 - Reports of expert committees/organizations (e.g., PPP panel consensus with external peer review)

PPPs are intended to serve as guides in patient care, with greatest emphasis on technical aspects. In applying this knowledge, it is essential to recognize that true medical excellence is achieved only when skills are applied in a such a manner that the patients' needs are the foremost consideration. The AAO is available to assist members in resolving ethical dilemmas that arise in the course of practice. (AAO Code of Ethics)

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

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 optic nerve head appearance 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]

Management Plan for Patients in Whom Therapy is Indicated

- A reasonable initial goal is to set a target pressure 20% less than mean of several baseline IOP measurements [A:I]
- Choose a 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 [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]

Follow-up Intervals

- Visit intervals depend on the interaction between patient and disease, which is unique for every patient. [A:III]
- Frequency of periodic optic nerve head and visual field evaluation is based on risk assessment. Patients with thinner corneas, higher IOPs, disc hemorrhage, larger cup-to-disc, larger mean pattern standard deviation, or family history of glaucoma may warrant closer follow-up.

Patient Education For Patients with Medical Therapy

- Discuss diagnosis, 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]