



Primary Open-Angle Glaucoma (Initial 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:II)**
- 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

- Set an initial target pressure of at least 25% lower than pretreatment IOP, assuming that the measured pretreatment pressure range contributed to optic nerve damage. **(A:I)**
- Target pressure is an estimate; all treatment decisions must be individualized according to the needs of the patient. **(A:III)**
- Medical therapy is presently the most common initial intervention to lower IOP; consider balance between side effects and effectiveness in choosing a regimen of maximal effectiveness and tolerance to achieve the desired IOP reduction for each patient. **(A:III)**
- Assess the patient who is being treated with glaucoma medication for local ocular and systemic side effects and toxicity. **(A:III)**
- Laser trabeculoplasty can be considered as initial therapy in selected patients **(A:I)**
- Filtering surgery can be considered in selected cases as initial therapy. **(A:I)**

Surgery and Postoperative Care for Laser Trabeculoplasty Patients

- The ophthalmologist who performs surgery has the following responsibilities:
 - Obtain informed consent. **(A:III)**
 - Ensure that the preoperative evaluation confirms the need for surgery. **(A:III)**
 - At least one IOP check within 30 minutes to 2 hours of surgery. **(A:I)**
 - Follow-up examination within 6 weeks of surgery or sooner if concern about IOP-related optic nerve damage. **(A:III)**

Surgery and Postoperative Care for Incisional Glaucoma Patients

- The ophthalmologist who performs surgery has the following responsibilities:
 - Obtain informed consent. **(A:III)**
 - Ensure that the preoperative evaluation accurately documents findings and indications for surgery. **(A:III)**
 - Prescribe topical corticosteroids in the postoperative period. **(A:II)**
 - Follow-up evaluation on the first postoperative day (12 to 36 hours after surgery) and at least once during the first 1 to 2 weeks. **(A:II)**
 - In the absence of complications, perform additional postoperative visits during a 6-week period. **(A:III)**
 - Schedule more frequent visits, as necessary, for patients with postoperative complications. **(A:III)**
 - Additional treatments as necessary to maximize chances for a successful long-term result. **(A:III)**

Patient Education for Patients with Medical Therapy

- Discuss diagnosis, severity of the disease, prognosis and management plan, and likelihood of lifelong therapy. **(A:III)**
- Educate about eyelid closure or 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 2010 (www.aao.org)