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International Council of Ophthalmology/
International Federation of Ophthalmological Societies

ICO International Clinical Guidelines

Primary Angle Closure (Initial Evaluation and Therapy)

(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)

- Systemic history (e.g., use of topical or systemic medications) **(A:III)**
- Ocular history (symptoms suggestive of intermittent angle-closure attacks) **(A:III)**
- Family history of acute angle-closure glaucoma **(B:II)**

Initial Physical Exam (Key elements)

- Visual acuity **(A:III)**
- Refractive status **(A:III)**
- Pupils **(A:III)**
- Slit-lamp biomicroscopy **(A:III)**
 - Anterior chamber inflammation suggestive of a recent or current attack
 - Corneal edema
 - Central and peripheral anterior-chamber depth
 - Iris atrophy, particularly sector types, posterior synechiae or mid-dilated pupil
 - Signs of previous angle closure attacks
- Measurement of IOP **(A:III)**
- Gonioscopy of both eyes **(A:III)**
- Evaluation of fundus and optic nerve head using direct ophthalmoscope or biomicroscope **(A:III)**

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Diagnosis

- Establish a diagnosis of primary angle closure, excluding secondary forms **(A:III)**

Management Plan for Patients in Whom Iridotomy is Indicated

- Treat acute PAC by laser iridotomy or incisional iridectomy if a laser iridotomy cannot be successfully performed. **(A:III)**
- In acute angle-closure attacks, usually use medical therapy first to lower the IOP, to reduce pain and clear corneal edema in preparation for iridotomy. **(A:III)**
- Perform prophylactic iridotomy in fellow eye if chamber angle is anatomically narrow. **(A:II)**
- Perform surgery on one eye at a time for patients requiring bilateral incisional iridectomy (several days apart) whenever feasible to avoid simultaneous bilateral complications. **(A:III)**

Surgery and Postoperative Care for Iridotomy Patients

- Ensure the patient receives adequate postoperative care. **(A:III)** Plan prior to and after surgery includes:
 - Informed consent **(A:III)**
 - At least one preoperative evaluation by the surgeon **(A:III)**
 - At least one IOP check within 30 to 120 minutes following laser surgery **(A:II)**
 - Use of topical anti-inflammatory agents in the postoperative period, unless contraindicated **(A:III)**
- Follow-up evaluations include:
 - Evaluation of patency of iridotomy **(A:III)**
 - Measurement of IOP **(A:III)**
 - Gonioscopy, if not performed immediately after iridotomy **(A:III)**
 - Pupil dilation to reduce risk of posterior synechiae formation **(A:III)**
 - Fundus examination as clinically indicated **(A:III)**
- Use medications perioperatively to avert sudden IOP elevation, particularly in patients with severe disease. **(A:III)**
- Refer for and encourage patients with significant visual impairment or blindness to use vision rehabilitation and social services. **(A:III)**

Evaluation and Follow-up of Patients with Iridotomy:

- After iridotomy, follow patients with glaucomatous optic neuropathy as specified in the Primary Open-Angle Glaucoma PPP. **(A:III)**
- Follow all other patients as specified in the Primary Open-Angle Glaucoma Suspect PPP. **(A:III)**

Education for Patients if Iridotomy is not Performed:

- Inform patients at risk for acute angle closure about symptoms of acute angle-closure attacks and instruct them to notify immediately if symptoms occur. **(A:III)**
- Warn patients of danger of taking medicines that could cause pupil dilation and induce an angle-closure attack. **(A:III)**

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

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 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).

ICO International Clinical Guidelines: Primary Angle Closure (Initial Evaluation and Therapy)

Page 4

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