







INTRODUCTION

These guidelines are a practical and accessible resource designed to assist eye care professionals in effectively managing myopia. They provide a structured approach to integrating myopia management into daily practice, ensuring patients receive comprehensive, evidence-based care.

Built upon the latest scientific research, these guidelines help practitioners evaluate, diagnose, and implement appropriate treatment plans for myopia control. They offer a step-by-step framework to streamline decision-making and improve patient outcomes.

The approach includes:

- * Initial patient consultation
- * Evaluating risk factors for onset and progression
- * Selecting appropriate management options
- * Establishing a follow-up plan



INITIAL PATIENT CONSULTATION

1. History Taking

- Patient details: Age, gender, history of ocular and general health, ocular surgery.
- Family history: Presence of myopia in parents.
- Visual habits: Time spent on near work (reading, screens) and outdoor activities.
- Previous myopia control treatments: If applicable.

2. Clinical Examination

- Refraction: Cycloplegic and non-cycloplegic refraction to assess refractive error.
- Best-Corrected Visual Acuity (BCVA)
- Binocular vision & accommodation tests: Evaluating accommodation lag, amplitude, facility, and vergence functions.
- Anterior eye health assessment: Using a slit-lamp and
- intraocular pressure (IOP) measurement.
- Corneal topography (if needed): Particularly for fitting contact lenses.
- Axial length measurement: Helps assess myopia progression, if available.
- Fundus examination & imaging: Dilation-based examination, recommended annually for high myopes.

EVALUATING RISK FACTORS FOR MYOPIA ONSET AND PROGRESSION

Increased Risk of Onset (Developing Myopia)

- Refractive Status: Lower hyperopia than age norms (e.g., +0.75D or less at age 6).
- Family History: One or both parents are myopic.
- Ethnicity: Higher prevalence in Asian populations.
- Lifestyle Factors: Low outdoor time (<2 hours/day).
- Excessive near work (reading <20 cm, >45 min without breaks).

Age (Years)	Refraction (Diopters, D)
6	+0.75 D or less
7-8	+0.50 D or less
9-10	+0.25 D or less
11	Emmetropia (0.00 D)

Increased Risk of Progression (Worsening Myopia)

- Age of Onset: Younger onset (<10 years) leads to faster progression.
- Axial Length Growth: >0.2mm/year suggests progression.
- Refractive Change: >0.50D increase per year.
- Binocular Vision Factors: Near esophoria, high accommodative lag.
 - Environmental Factors:
 Continued high near work
 without breaks.
 - Limited outdoor activity.

SELECTING APPROPRIATE MANAGEMENT OPTIONS (Non-myopic Children)

A. Lifestyle Recommendations to **Reduce Myopia Risk**

- Increase Outdoor Time: At least 2 hours/day reduces myopia risk.
- Near Work Adjustments: Maintain 30 cm distance, take breaks every 45 minutes.
- Proper Lighting: Ensure good indoor lighting, avoid dim environments.

B. Monitoring & Risk Assessment

- Regular Eye Exams: Annual for low-risk, every 6-12 months for at-risk children.
- Refractive Screening: Check hyperopia levels, monitor for early myopia signs.
- Axial Length Monitoring: Measure growth (>0.1mm/year indicates risk).

C. Early Intervention Strategies (For High-Risk Children)

- Low-Dose Atropine (0.01-0.05%): Consider for high-risk cases.
- Spectacle Intervention: Use plus lenses for accommodative lag.

• Education & Parental Guidance: Inform about risk factors, promote outdoor activities.



SELECTING APPROPRIATE MANAGEMENT OPTIONS (Myopic Children)

When choosing a myopia control strategy, consider the following:

- Effectiveness of treatment
- Parental Willingness

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 Support
- Risk of progression
- Cost
- Availability
- Safety & Compliance

Treatment	Effectiveness	Considerations
Atropine Eye Drops (0.01%-0.05%)	30-60% reduction in progression	Possible side effects (light sensitivity, blurred near vision). Low doses minimize effects.
Orthokeratology (Ortho-K)	40-50% reduction	Overnight lens wear; risk of infection if hygiene is poor.
Multifocal Soft Contact Lenses	30-50% reduction	Requires daily wear; affects vision clarity slightly.
Bifocal/Progressive Spectacles	10-30% reduction	Less effective but a safer option for young children.
Peripheral defocus spectacles HAL, DIMS, DOT spectacles	52% for refractive error and 62% for axial elongation	May take time to adapt.
Environmental Changes	Reduces onset risk	Outdoor time (2+ hours/day) and near-work breaks help.

FOLLOW-UP PLAN



Recommended Procedures

- Update patient history
- Measure best-corrected visual acuity
- Perform over-refraction
- Conduct anterior eye examination, including lid eversion
- Use corneal topography (as required for Ortho-K)

- Assess pupil size and light response (if atropine is used)
- Check intraocular pressure
- Perform cycloplegic refraction (both objective and subjective, every 6 months)
- Conduct fundus examination (annually) • Measure axial length (initially and every 6 months)

6 Months **12 Months**





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Disclaimer:

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