

REFRACTIVE AMBLYOPIA ICD-9-CM: 368.03

DEFINITION:

Refractive Amblyopia is characterized by a decrease in visual acuity and deficient performance of the visual system not attributable to obvious structural or pathological anomalies, and not correctable with a refractive prescription. Amblyopia results in deficient visual acuity and an array of defective nonacuity factors. Refractive Amblyopia is a consequence of poor image quality caused by a lack of optical correction of significant ametropia during the formative period of visual development.

SIGNS AND SYMPTOMS:

The signs and symptoms associated with Refractive Amblyopia may include, but are not limited to, the following:

<ul style="list-style-type: none"> • Difficulty visually tracking and/or following objects 	<ul style="list-style-type: none"> • Inaccurate/inconsistent depth judgment
<ul style="list-style-type: none"> • Loss of place, repetition, and/or omission of words and/or lines of print while reading 	<ul style="list-style-type: none"> • Spatial disorientation
<ul style="list-style-type: none"> • Need to utilize a marker to avoid loss of place 	<ul style="list-style-type: none"> • Asthenopia (IC: 368.13)
<ul style="list-style-type: none"> • Abnormal postural adaptation/abnormal working distance (ICD: 781.9) 	<ul style="list-style-type: none"> • Inaccurate/inconsistent visual attention, concentration, and/or awareness
<ul style="list-style-type: none"> • Diminished accuracy with increased time on task 	<ul style="list-style-type: none"> • Distractibility
<ul style="list-style-type: none"> • Inaccurate/inconsistent work product 	<ul style="list-style-type: none"> • Difficulty sustaining near visual function
<ul style="list-style-type: none"> • Reduced efficiency and productivity 	<ul style="list-style-type: none"> • Abnormal general fatigue
<ul style="list-style-type: none"> • Visual field neglect 	<ul style="list-style-type: none"> • Incoordination/clumsiness (ICD: 781.3)
<ul style="list-style-type: none"> • Inaccurate eye-hand coordination 	

DIAGNOSTIC FACTORS:

Refractive Amblyopia is characterized by one or more of the following diagnostic findings:

<ul style="list-style-type: none"> • Reduced monocular or binocular visual acuity 	<ul style="list-style-type: none"> • Spatial uncertainty
<ul style="list-style-type: none"> • Relatively high isometropia (ICD: 367) 	<ul style="list-style-type: none"> • Anomalous eye movements (ICD: 794.14)
<ul style="list-style-type: none"> • Suppression of binocular vision (ICD: 368.31) 	<ul style="list-style-type: none"> • Increased effects of crowding
<ul style="list-style-type: none"> • Anisometropia (ICD: 367.3) 	<ul style="list-style-type: none"> • Increased saccadic latency and reduced saccadic accuracy
<ul style="list-style-type: none"> • Binocular vision disorder (ICD:368.30) 	<ul style="list-style-type: none"> • Depressed contrast sensitivity
<ul style="list-style-type: none"> • Reduced stereopsis (ICD: 367.33) 	<ul style="list-style-type: none"> • Decreased accommodative function (ICD:367.53)
<ul style="list-style-type: none"> • Accommodative disorder (ICD: 367.53) 	<ul style="list-style-type: none"> • Poor speed and span of recognition
<ul style="list-style-type: none"> • Deficient saccadic (ICD: 379.57) and/or pursuit (ICD: 379.58) eye movements 	<ul style="list-style-type: none"> • Faulty eye-hand coordination
<ul style="list-style-type: none"> • Inaccurate and/or unsteady foveal fixation 	

Note: Additional testing may be appropriate as part of the differential diagnostic workup to rule out or define other potential causes of reduced visual acuity and visual performance. Other potential causes include refractive, stimulus deprivation, psychogenic, and structural/pathological defects.

THERAPEUTIC MANAGEMENT CONSIDERATIONS:

The doctor of optometry determines appropriate diagnostic and therapeutic modalities, and frequency of evaluation and follow up, based on the urgency and nature of the patient's conditions and unique needs. The management of the case and duration of treatment would be affected by:

- The severity of symptoms and diagnostic factors including onset and duration of the problem
- The implications of associated visual conditions
- Implications of patient's general health and effects of medications taken
- Etiological factors
- Extent of visual demands placed upon the individual
- Patient compliance and involvement in the prescribed therapy regimen
- Type, scope, and results of prior interventions

PRESCRIBED TREATMENT REGIMEN:

Successful treatment of Refractive Amblyopia must address the abnormal refractive condition and the defective performance of the amblyopic visual system. A small percentage of cases are successfully managed by prescription of therapeutic lenses and/or prisms. However, most patients with Refractive Amblyopia require orthoptics/vision therapy (including prism/lens therapy). Optometric vision therapy usually incorporates the prescription of specific treatments in order to:

- Provide a clear optical image
- Normalize and equalize fixation accuracy
- Normalize and equalize oculomotor control
- Normalize and equalize accommodative accuracy and responses
- Normalize visual discrimination
- Eliminate abnormal suppression
- Develop normal accommodative/convergence relationships
- Establish normal binocular function

DURATION OF TREATMENT:

The following treatment ranges are provided as a guide for third-party claims processing and review purposes. Treatment duration will depend on the particular patient's condition and associated circumstances. When duration of treatment beyond these ranges is required, documentation of the medical necessity for additional treatment services may be warranted.

- The most commonly encountered Refractive Amblyopia which is not complicated by strabismus usually requires 36 to 48 hours of office therapy.
- Uncomplicated cases of Refractive Amblyopia characterized by mild Amblyopia and stable binocular function may require 12 to 20 hours of office therapy.
- Refractive Amblyopia complicated by:
 - Suppression: up to an additional 12 hours of office therapy
 - General binocular disorder: up to an additional 32 hours of office therapy
 - Eccentric/unsteady foveal fixation: up to an additional 16 hours of office therapy
 - Strabismus: up to an additional 56 hours of office therapy
 - Associated conditions such as stroke, head trauma, or other systemic condition may require substantially more office therapy

FOLLOW-UP CARE:

At the conclusion of the active treatment regimen, periodic follow-up evaluation should be provided at the appropriate intervals. Therapeutic lenses may be prescribed during or at the conclusion of active vision therapy for the maintenance of long-term stability. Some cases may require additional therapy due to decompensation.