

# ACCOMMODATIVE ESOTROPIA

ICD-9-CM: 378.35

## DEFINITION:

(Convergent Strabismus, Accommodative) A condition in which binocular fixation is not present under normal seeing conditions. The foveal line of sight of an eye deviates inward and fails to intersect the object of fixation. The deviation is due, at least in part, to excessive accommodation accompanying high hyperopia or high ACA (accommodative convergence/accommodation) ratio.

## SIGNS AND SYMPTOMS:

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

- Transient blurred vision (ICD: 368.12)
- Difficulty visually tracking and/or following objects
- Loss of place, repetition, and/or omission of words and/or lines of print while reading
- Need to utilize a marker to avoid loss of place
- Frequent transpositions when copying from one source document to another
- Diminished accuracy with increased time on task
- Abnormal postural adaptation/abnormal working distance (ICD: 781.9)
- Inaccurate/inconsistent work product
- Reduced efficiency and productivity
- Photophobia
- Diplopia (ICD: 368.2)
- Eye turn, deviation
- Visual field neglect
- Inaccurate/inconsistent depth judgement
- Spatial disorientation
- Asthenopia (ICD: 368.13)
- Orbital pain (ICD: 379.91)
- Headaches (ICD: 784.0)
- Inaccurate/inconsistent visual attention/concentration and/or awareness
- Increased distractibility
- Difficulty sustaining near visual function
- Abnormal general fatigue
- Dizziness/vertigo; especially during/after sustained visually-demanding tasks (ICD: 780.4780.4)
- Motion sickness (ICD: 994.6)
- Dysrhythmia
- Incoordination/clumsiness (ICD: 781.3)
- Inaccurate eye-hand coordination

## DIAGNOSTIC FACTORS:

Accommodative esotropia is characterized by one or more of the following diagnostic findings:

- Strabismus, esotropia
- Accommodative dysfunction
- High AC/A ratio
- Loss of bifoveation in tests of fusion

**Note:** Additional testing may be appropriate as part of the differential diagnosis to rule out other potential causes of reduced visual acuity and visual performance. Other potential causes include refractive, accommodative esotropia, psychogenic, and other 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 accommodative esotropia must address the defective performance of the amblyopic visual system and the accompanying strabismus and associated conditions. Orthoptics/vision therapy (including prism/lens therapy) is usually required to achieve maximum improvement in patients with accommodative esotropia. Optometric orthoptics/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
- Eliminate abnormal suppression
- Eliminate the strabismus and associated conditions
- Normalize associated deficiencies in ocular motor control
- Eliminate suppression
- Normalize fusional vergence ranges
- Normalize fusional vergence facility and flexibility
- Normalize fusional vergence stability
- Normalize accommodative/convergence relationships
- Normalize depth judgments and/or stereopsis
- Integrate binocular function with information processing
- Reduce or eliminate esophoria
- Normalize abductive ranges
- Integrate ocular motor skills with accurate motor responses
- Integrate ocular motor skills with other sensory skills (vestibular, kinesthetic, tactile, and auditory)

#### **DURATION OF TREATMENT:**

The following treatment ranges are provided as a guide for third-party claims processing and review purposes. Treatment duration will depend upon 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 accommodative esotropia case usually requires 40 to 55 hours of office therapy.
- The rare, uncomplicated, cases of accommodative esotropia that are associated with an infrequent strabismus and no associated conditions may require 24 to 32 hours of office therapy.

#### **FOLLOW-UP CARE:**

At the conclusion of the active treatment regimen, periodic follow-up evaluation should be provided at 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.