VERTICAL HETEROPHORIA
ICD-9-CM: 378.43

DEFINITION:
A sensory and neuromuscular anomaly of the binocular visual system characterized by a tendency for the eyes to vertically dissociate.

SIGNS AND SYMPTOMS:
The symptoms and signs associated with vertical heterophoria are related to performance of visually demanding tasks and/or making spatial judgments. They may include, but are not limited to, the following:

- 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
- 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)
- Inaccurate/inconsistent depth judgement
- 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:
Vertical heterophoria is characterized by one or more of the following diagnostic findings:

- Vertical phoria at distance or near
- Skewed supra/infraductional ranges
- Restricted supra or infraductional ranges
- Vertical fixation disparity

Additional testing may be appropriate as part of the differential diagnostic workup for vertical heterophoria in order to rule out or define other concurrent medical conditions and to differentiate associated visual conditions.

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
VERTICAL HETEROPHORIA (CONTD.)

PRESCRIBED TREATMENT REGIMEN:
A percentage of cases are successfully managed solely by the prescription of therapeutic lenses and/or prisms. Most vertical heterophorias, however, require orthoptics/vision therapy. Optometric vision therapy for vertical heterophoria usually incorporates the prescription of specific treatments in order to:

- Normalize associated deficiencies in ocular motor control
- Normalize associated deficiencies in accommodation
- Develop adequate fusional ranges
- Develop fusional stability
- Normalize accommodative/convergence relationships
- Normalize depth judgments and/or stereopsis
- Integrate binocular function with information processing
- Reduce or eliminate vertical phoria
- Enhance compensative supraduction or infraduction ranges
- Develop adequate fusional ranges and stability in all positions of gaze
- Normalize fusional vergence facility and flexibility
- 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 vertical heterophoria usually requires 22 to 36 hours of office therapy.
- Uncomplicated vertical heterophoria requires 25 hours of office therapy.
- Vertical heterophoria complicated by:
  - suppression: up to an additional 8 hours of office therapy
  - diminished stereopsis: up to an additional 8 hours of office therapy
  - other diagnosed visual anomalies: may require additional office therapy
  - associated conditions such as stroke, head trauma, and/or other systemic conditions: 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 appropriate intervals. Therapeutic lenses may be prescribed during or at the conclusion of active vision therapy for the maintenance of long-term stability.