

# VA/DoD Clinical Practice Guideline for the Management and Rehabilitation of Post-Acute Mild Traumatic Brain Injury (2021)

# About the Guideline

- This guideline is based on 135 peer-reviewed works of literature.
- The guideline committee consisted of more than 60 individuals with expertise in the field of study.
- To accompany this clinical practice guideline, the workgroup created a toolkit of materials for providers and patients which can be found at <a href="https://www.healthquality.va.gov/index.asp">https://www.healthquality.va.gov/index.asp</a>.

## **Key Clinical Considerations**

Become familiar with the recommendations and best-practice statements provided in this guideline.

## **Care Setting**

- A primary care setting is suggested for management of patients with symptoms of mild traumatic brain injury (mTBI).
- There is no recommendation for or against specialized treatment programs to improve function, morbidity, and work status in patients with mTBI.

### **Diagnosis and Assessment**

- Severity of injury is determined using a variety of criteria, including structural imaging, loss of or alteration of consciousness/mental state, posttraumatic amnesia, Glasgow Coma Scale, and duration of time since injury.
- Symptoms that appear after 30 days of initial injury should be evaluated; symptom-specific evaluation for non-mTBI etiologies is recommended.
  - Patients who are initially asymptomatic are not likely to develop new symptoms 30 days after initial mTBI.
- Laboratory and physiologic testing, such as serum biomarkers and electroencephalogram, are not suggested for diagnostic purposes. Computed tomography and magnetic resonance imaging are not recommended if the patient presents more than 1 week postinjury.
- Computerized postconcussive screening batteries, such as Automated Neuropsychological
  Assessment Metrics or Immediate Post-Concussion Assessment and Cognitive Testing, are not
  recommended for routine diagnosis and care of symptomatic mTBI patients, due to lack of
  evidence to support the benefits in the post-acute period.
- Neuropsychological/cognitive testing should not be performed within the first 30 days after mTBI.
  - o Routine testing is not supported by the evidence in the subacute period.

### mTBI and Future Neurocognitive Decline

- There is insufficient evidence to support the theory that single or repeated mTBI increases a patient's risk of future neurocognitive decline.
- There is insufficient evidence to support the theory that injury-related clinical factors, management factors, or demographics increase a patient's risk of future neurocognitive decline from a single or repeated mTBI.



#### **Treatment**

- Treatment strategy and outcome prognosis should not be based on mechanism of injury.
- A symptom-driven approach should be used when evaluating and treating patients who have suffered a concussion/mTBI and continue to experience symptoms.
  - o Cognitive symptoms
    - A short trial of clinician-directed cognitive rehabilitation services is suggested for patients with executive function, memory, or attention problems.
    - Self-administered computer training programs are not suggested as a means of cognitive rehabilitation for patients with symptomatic mTBI.
  - Behavioral symptoms
    - Symptoms such as depression, anxiety, and irritability are commonly experienced with concussion/mTBI. Patients should be evaluated for major depressive disorder, posttraumatic stress disorder, substance abuse disorders, and suicidality and referred for prompt treatment if symptoms are present.
    - Evaluation and management should be the same for all patients, regardless of whether they have had an mTBI.
  - Vestibular and proprioceptive symptoms
    - Patients who experience ongoing symptoms of dizziness or disequilibrium should be referred for vestibular therapy with a vestibular trained provider, such as an occupational therapist or physical therapist.
  - Visual symptoms
    - There is no evidence either for or against a treatment method for visual disturbances, such as visual tracking deficits, diplopia, convergence, or accommodation deficits, related to concussion/mTBI.
  - Tinnitus
    - There is no recommendation for or against particular modalities for treatment of tinnitus in patients with mTBI.
  - Exertion-induced symptoms
    - There is no recommendation for or against treatments for exertion-induced symptoms in patients with mTBI.
- Interventions with insufficient evidence
  - Complementary and integrative health
    - There is no recommendation for or against the use of yoga, mindfulness, acupuncture, meditation, tai chi, massage, a sensory deprivation tank, chiropractic therapy, or cranial electrotherapy stimulation in treating patients with mTBI.
  - Hyperbaric oxygen therapy is not recommended as a treatment for patients with mTBI.
  - Repetitive transcranial magnetic stimulation is not recommended as a treatment for patients with mTBI symptoms.

#### Reference

U.S. Department of Veterans Affairs & U.S. Department of Defense. (revised July 2021). VA/DoD clinical practice guideline for the management and rehabilitation of post-acute mild traumatic brain injury. Veterans Health Administration, Office of Quality and Performance, The Management of Concussion Mild Traumatic Brain Injury Working

Group. https://www.healthquality.va.gov/guidelines/Rehab/mtbi/VADoDmTBICPGFinal508.pdf