Severe

Normal or

abnormal

>24 hours

>7 davs

<9

>24 hours; severity based on

other criteria

# **VA/DoD CLINICAL PRACTICE GUIDELINES**

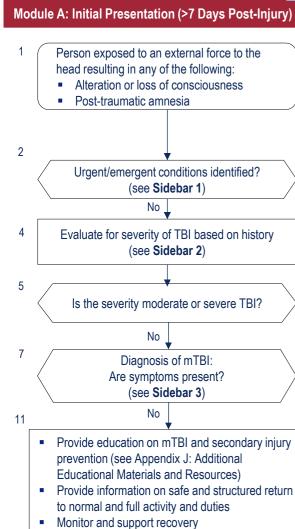
Yes

Yes

Yes

VA/DoD Evidence-Based Practic

The Management and Rehabilitation of **Post-Acute Mild Traumatic Brain Injury** 



Access to the full guideline and additional resources is

https://www.healthguality.va.gov/guidelines/Rehab/mtbi/

available at the following link:

# Sidebar 1: Potential Indicators for Immediate Referral

· Declining level of consciousness · Declining neurological exam/focal neurological symptoms

Is person currently

deployed on military or

combat operation?

Go to Module B.

**Box 12** 

No

- Pupillary asymmetry Seizures
- Repeated vomiting

· Slurred speech Marked change in behavior or

and treatment

Consult with a clinician with

TBI experience

Yes

Abbreviations: CPG: clinical practice guideline; DoD: Department of Defense;

mTBI: mild traumatic brain injury; NSI: Neurobehavioral Symptom Inventory;

orientation

Double vision

Motor or sensory deficits

· Worsening headache

Refer for emergency evaluation

Follow DoD policy guidance

for management of mTBI in

the deployed setting

b No clinically relevant findings

Criteria

Structural imaging (see

Loss of Consciousness

Post-traumatic amnesia

level is assigned

Alteration of consciousness/

Glasgow Coma Scale (best

available score in first 24 hours)d

Recommendation 4)

mental statec

<sup>C</sup> Alteration of mental status must be immediately related to the trauma to the head; typical symptoms would be: looking and feeling dazed and uncertain of what is happening, confusion, difficulty thinking clearly or responding appropriately to mental status questions, and/or being unable to describe events immediately before or after the injury event

Sidebar 2: Classification of TBI Severity<sup>a</sup>

Mild

Normal<sup>b</sup>

0-30 min

up to 24 hours

0-1 day

13-15

<sup>a</sup> If patient meets criteria in more than one category of severity, the higher severity

Moderate

Normal or

abnormal

>30 min and

<24 hours

>1 and <7 days

9-12

d In April 2015, the DoD released a memorandum recommending against the use of Glasgow Coma Scale scores to diagnose TBI (see the memorandum for additional information:

https://www.health.mil/Reference-Center/Policies/2015/04/06/ Traumatic-Brain-Injury-Updated-Definition-and-Reporting)

### Sidebar 3: Possible Post-Concussion Symptoms<sup>a,b</sup> Behavior/Emotional **Cognitive Symptoms Physical Symptoms Symptoms** Problems with: Depression Headache Dizziness/vertigo Anxiety Attention Agitation Balance problems Concentration Irritability Nausea Memory

- Fatique Speed of processing Impulsivity Sleep disturbance Judament Aggression Visual disturbance Executive functions · Sensitivity to light Speech and Hearing language Visual-spatial difficulties/loss Tinnitus function Sensitivity to noise
- a Symptoms that may develop within 30 days post-injury
- <sup>b</sup> Symptoms can be monitored with instruments such as the NSI or RPCQ
- PTSD: posttraumatic stress disorder; RPCQ: Rivermead Post-Concussion Questionnaire; SUD: substance use disorder; TBI: traumatic brain injury; VA: Department of Veterans Affairs

VA/DoD CLINICAL PRACTICE GUIDELINES **June 2021** 

# Module B: Management of Symptoms Persisting >7 days After mTBI

Complete history and physical examination, including symptom attributes, intimate partner violence, neurologic and mental

Patient with persistent symptoms after mTBI (see Sidebar 3)

status exams, psychosocial evaluation, and suicide risk

(see Sidebars 3 and 4); assess patient priorities

- Evaluate for other conditions including but not limited to chronic pain, sleep disorders, depression, PTSD, anxiety, and SUD (see Sidebar 5)
- Develop and implement a patient-centered, individualized treatment plan for mTBI and other common co-occurring conditions by referring to recommendations from relevant VA/DoD CPGs (see Sidebar 5)
  - Educate patient/caregiver on symptoms and expected recovery (see Sidebar 6)
- Are symptoms persistent and functionally limiting 30 days after mTBI despite symptom-based treatment?

No

- Continue management as appropriate
- Monitor for comorbid conditions
- Address:
  - Return to work/duty/activity
  - Community participation
  - Family/social issues

# Sidebar 4: Symptom Attributes

- Duration, onset, and location of symptom
- · Previous episodes, treatment and response
- Patient perception of symptom
- · Impact on functioning

18

22

· Factors that exacerbate or alleviate symptoms

# Sidebar 6: Early Intervention

- Integrate patient and caregiver needs and preferences into assessment and treatment
- Provide information and education on symptoms and expected recovery
- Provide reassurance on expectation of positive recovery
- Educate about prevention of further injury
- Empower patient for self-management
- Consider teaching relaxation and stress management techniques as needed
- Recommend limiting use of caffeine/nicotine/alcohol
- Encourage monitored progressive return to normal
- duty/work/activity/exercise<sup>a</sup> Discuss need for consistency with healthy nutrition, exercise, and sleep
- habits
- Provide information regarding the National Suicide Prevention Lifeline (1-800-273-8255) if appropriate
- <sup>a</sup> Provider resources for progressive return to activity (PRA) are available at: https://www.health.mil/About-MHS/OASDHA/Defense-Health-Agency/Research-and-Development/Traumatic-Brain-Injury-Center-of-Excellence/Provider-Resources



Yes Initiate further symptom-based treatment (see Recommendations 10-16) 19 Consider consult and collaboration with a clinician with TBI experience 20 Yes Has treatment plan been completed?

Consider case management with ongoing

symptom-based primary care (see Sidebar 7)

Sidebar 5: Relevant VA/DoD CPGs

- VA/DoD Clinical Practice Guideline for the Management of Chronic Insomnia Disorder and Obstructive Sleep Apnea. Available at: https://www.healthquality.va.gov/quidelines/CD/insomnia/index.asp
- VA/DoD Clinical Practice Guideline for the Management of Major Depressive Disorder. Available at: https://www.healthguality.va.gov/guidelines/MH/mdd/
- VA/DoD Clinical Practice Guideline for the Management of Opioid Therapy for Chronic Pain. Available at:

https://www.healthquality.va.gov/quidelines/Pain/cot/

- VA/DoD Clinical Practice Guideline for the Management of Posttraumatic Stress Disorder and Acute Stress Reaction. Available at: https://www.healthqualitv.va.gov/guidelines/MH/ptsd/
- VA/DoD Clinical Practice Guideline for the Management of Substance Use Disorders. Available at: https://www.healthquality.va.gov/guidelines/MH/sud/
- · VA/DoD Clinical Practice Guideline for the Primary Care Management of Headache. Available at: https://www.healthquality.va.gov/quidelines/Pain/headache/

VA/DoD Clinical Practice Guideline for the Management of Chronic

Multisymptom Illness. Available at: https://www.healthquality.va.gov/guidelines/MR/cmi/

 VA/DoD Clinical Practice Guideline for the Assessmen and Management of Patients at Risk for Suicide. Available at:

https://www.healthquality.va.gov/quidelines/MH/srb/



## Sidebar 7: Case Management

### Case managers may:

- Provide coordination of care as outlined in the individualized treatment plan (referrals, authorizations, appointments/reminders)
- Provide advocacy and support for Veteran/Service Member and caregivers
- · Reinforce early interventions and education
- Address psychosocial issues (financial, family, housing, or school/work)
- · Connect patient to available resources