ADULT MILD TBI GUIDELINES
for clinicians
Stanford Brain Performance Center

RISK FACTORS FOR MORE SEVERE INJURY
- Age > 60 years old
- Recurrent vomiting
- Loss of consciousness
- Severe mechanism of injury
- Severe/worsening headache
- Posttraumatic Amnesia
- Glasgow Coma Score < 15
- Posttraumatic seizure
- Focal neurologic deficit
- Clinical suspicion for skull fracture

ASSESS
Assess symptoms using validated symptom scales.
- Assess for concussion subtypes with cognitive, balance, and vestibulo-oculomotor testing
- Identify risk factors for poor prognosis

Consider additional diagnoses such as intoxication, hyperglycemia, dehydration, stroke etc.

COUNSEL
Provide information:
- Warning signs of more serious injury
- Typical recovery course and risk factors for poor prognosis
- Future injury prevention strategies
- The need for social and emotional support

Offer clear instructions on a return to activity customized to the patient’s symptoms.
- Gradual return to physical and cognitive activity after 2-3 days of rest. Symptom exacerbation with physical activity is normal.
- No contact sports, risky activity, or driving until cleared for return by a physician.

REFER
Identify and tailor treatment plans to address:
- Acutely worsening symptoms, considering neuroimaging
- Concussion subtypes (page 2)
- Appropriate referrals

EXERCISE - SLEEP - NUTRITION
- Early cardio exercise (usually stationary bike or brisk walking/jogging) to support recovery for at least 20 minutes, 4x per week beginning the first week of recovery
- Sleep is likely to be disrupted during concussion recovery – advise sleep hygiene strategies
- Review appropriate hydration, proper nutrition, and avoidance of alcohol and excessive caffeine

ANXIETY AND MOOD
- Advise tracking mood to identify triggers
- Discuss that tasks may take longer than usual to complete during recovery
- Review relaxation strategies to reduce day-to-day stress and support a positive outlook

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<table>
<thead>
<tr>
<th>Subtype</th>
<th>Symptom</th>
<th>Therapeutic*</th>
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<tbody>
<tr>
<td>Vestibular</td>
<td>• Dizziness</td>
<td>• Vestibular physical therapy</td>
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<td>• Head movements cause symptoms</td>
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<td>Ocular-motor</td>
<td>• Difficulty focusing on moving objects or objects moving closer</td>
<td>• Dynamic vision therapy</td>
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<td>• Fatigue with reading</td>
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<tr>
<td>Cognitive</td>
<td>• Problems concentrating or remembering</td>
<td>• Cognitive-behavioral therapy</td>
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<td></td>
<td>• Problems completing tasks</td>
<td>• Neuropsychologist***</td>
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<tr>
<td>Headache/Migraine</td>
<td>• Light and/or noise sensitivity associated with Headaches</td>
<td>• Analgesia and avoidance of triggers</td>
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<td></td>
<td></td>
<td>• Headache Clinic***</td>
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<tr>
<td>Anxiety/Mood</td>
<td>• Anxious and/or depressed</td>
<td>• Psychiatrist and counseling***</td>
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<tr>
<td>Cervical Strain*</td>
<td>• Moving neck causes symptoms, neck pain, and/or headache</td>
<td>• Neck physical therapy</td>
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<tr>
<td>Sleep Disturbance</td>
<td>• Trouble going to sleep</td>
<td>• Sleep Medicine Clinic***</td>
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<tr>
<td></td>
<td>• Waking at night</td>
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<td></td>
<td>• Fatigue during the day</td>
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*Early cardio exercise and sleep hygiene is recommended for the recovery of all subtypes
**Cervical strain and sleep disturbance are concussion-associated conditions
***Consider referral for severe or prolonged symptoms greater than 2-4 weeks

Stanford Concussion Clinic Locations

Neuroscience Health Center
213 Quarry Road
Palo Alto, CA 94304
Phone: (650) 723-6469

Lucile Packard Children’s Hospital
321 Middlefield Road, Suite 225
Menlo Park, CA 94025
Phone: (650) 723-0991

Sports Medicine Clinic
450 Broadway Street
Redwood City, CA 94063
Phone: (650) 723-5643

med.stanford.edu/braincenter