CONCUSSION

Helping the Student Return to Learning

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If you have seen one concussion, you have seen EXACTLY ONE concussion. Just like every student is unique, every concussion is unique.
Consider the following situations:

- A 12 yr. old with headache, fatigue after 6th period math
- A 16 yr. old returns to school appearing withdrawn after spending 2 weeks after a concussion in her dimly-lit bedroom with no mobile phone
- A 15 yr. old with first-time migraine symptoms
- A 10 yr. old with a headache after lunch
- A 17 yr. old with daily headaches, history of generalized anxiety, and improving grades says she is “not any better” 2 months post-injury
- A 13 yr. old who slipped on the ice has a bad headache upon awakening
Concussions may:

- cause pain
- impair learning
- cause chronic mood problems
Students who sustain a concussion are at a higher risk for depression and anxiety symptoms. Symptoms such as pain, sleep impairment and substance abuse also contribute to suicidal thinking.

Second Impact Syndrome

- Experiencing a second concussion before signs and symptoms of a first concussion have resolved may result in rapid and usually fatal brain swelling.
Most Common Symptoms

• Headache: throbbing, steady, or both

• Light and/or noise sensitivity

• Cognitive difficulties (concentration, fogginess, slowness, memory)

• Fatigue

• Dizziness (Cognitive vs. Vestibular type)
What Your Students Say…

“I got my bell rung”

“Dinged”

“I feel weird”
Got a Concussion?

The Student:

- May not know
- May not report
- May lack insight
Physical:
- Headache
- Photo / Phono- sensitivity
- Diplopia / Blurriness
- Gastrointestinal symptoms
- Fatigue
- Dizziness

Cognitive:
- Memory problems
- Decreased attention
- Slowed processing
- Confusion

Emotional/Mood:
- Sadness/depression
- Anxiety
- Irritability
- Emotionality

Sleep:
- Increased sleep
- Decreased sleep
- Delayed sleep onset
Predictors of Complicated or Prolonged Recovery

• Migraine/post-traumatic migraine > simple headache
• Higher initial symptom score
• Recent concussion
• Level of cognitive activity
• “Cocooning”
• Pre-existing mood disturbance
• ADHD/Learning difficulties
Why is determining **prognosis** important?

- Individualized management
- Opportunity for cognitive counseling
- Encourages adherence with therapies
Barriers to Learning

What a Student may Experience Returning to the Classroom Post-Concussion

- Changing perceptions and attitudes
- Working harder to no avail
- Feeling socially isolated
- Getting “special treatment”
- Feeling anxious re: make-up work
- Having a loss of identity: academic, social group, athletic
- Experiencing labile emotions and irritability
- Aggravating pre-existing mood issues
How Neuropsychological Deficits Affect Classroom Function

Attention/Concentration

Short focus on lectures, class work, homework

Working Memory and Memory Retrieval

Holding instructions in mind as well as retaining and accessing new information
How Neuropsychological Deficits Affect Classroom Function

**Processing speed**

Keeping pace, processing verbal information effectively, taking notes

**Fatigue**

Decreased arousal/activation to engage basic attention, working memory
What the Student Should Be Told

• Get good rest for first 24-48 hours…Don’t cocoon!

• Gradually increase physical activity as tolerated

• Maintain regular sleep pattern

• Hydrate

• Try to avoid situations / stimuli that might cause the symptoms to escalate
Recovery from Concussion

% Recovered

Weeks Post Concussion

"Cocooning"
My injury is invisible
## “Return to Learn”
Some Classroom Modifications for Physical Symptoms

<table>
<thead>
<tr>
<th>Symptom</th>
<th>School Problem</th>
<th>Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>Symptom provocation</td>
<td>Breaks, rest periods</td>
</tr>
<tr>
<td>Photosensitivity/Visual difficulties</td>
<td>Reading and note-taking</td>
<td>Reduce screen brightness, Wear hat or tinted glasses, Seat near window may help, Enlarge font</td>
</tr>
<tr>
<td>Phonosensitivity</td>
<td>Noisy areas (cafeteria, gym, hallways)</td>
<td>Lunch in quiet area, Avoid band, shop, gym, Early class dismissal</td>
</tr>
</tbody>
</table>
Consider…

- Reducing cognitive demands (homework, extended deadlines)
- Emphasizing concepts vs memorization
- Quality vs quantity of learning
- Helping students plan strategic rest breaks (School Nurse is essential link!)
- Exemptions / postponement / modification of work / alternate methods of assessing mastery
About Those Kids…

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