Managing Extended Concussion Recovery Cases

Designing Return To Learn Protocols

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A Return To Learning Following A Traumatic Brain Injury

How to help the concussed student re-engage with academics
It’s all about rest!

TOTAL physical AND cognitive REST is CRUCIAL during the early post-injury period.

Initial time spent at home on total rest is advised if the student is symptomatic.
Students should not push through symptoms while recovering. The “no pain, no gain” theory doesn’t apply!

- Exacerbates physical & cognitive symptoms
- Prolongs recovery time
KEY to facilitating a successful transition from concussion recovery to academic studies:

Front load accommodations to avoid prolonged recovery
Impact of School Environment and Learning On Concussion Symptoms

Cognitive exertion (thinking) and the added stimulation of the school environment can significantly increase symptoms, even when the student has begun to recover.
The School’s Responsibility ...

Schools should ensure that cognitive demands (school work) placed upon the concussed student are below the student’s individual symptom threshold.
Acute Recovery Phase

Student is at home:

• Typically Day 1 to Week 1 on total rest
• Symptoms may be so severe student cannot concentrate for more than a few minutes
• Student should be on TOTAL cognitive & physical rest during this acute time period
Acute Recovery Phase ...

Step 1:
- No homework sent home to student OR parent
- Should be on “thinking shut-down” as much as possible
- Missed work *NOT* expected to be made up as soon as student returns to school
- Complete rest until symptom free for 24 hours
At Home

Once symptom free for 24 hours at home while engaging in **NO** “thinking activities”, student can progress to “light thinking activities”
At Home

Next ...

✔ Student can engage in light mental & cognitive activity for up to 2 hours – with rest breaks of 10-15 minutes every half hour during that time.

✔ Any symptoms that may occur are minor
Once student can sustain light cognitive activities without symptoms, he or she *may* be ready to progressively transition back to the school environment.
The Transition Back To School

Return to Learn (RTL) protocol should be defined and in place *prior* to the student’s return to school!
Return To Learn Options:

Academic adjustments

Expedited 504 plan

Fluidity is the key
Student should not return to school if ...

- Symptoms are moderate or severe
- Student is unable to sustain cognitive activity for at least 30 minutes without a rest break or recurrence of symptoms
- The physician managing the student’s concussion does not allow a return to school
**Step 2: Transitioning back to school**

**Half Day of School With Accommodations:**

- Symptoms are tolerable with accommodations in place at this time
- Symptoms may spike initially upon return ... incorporate rest breaks into the day
- **DO NOT** alternate between AM & PM classes
- Student may benefit from a combination of half days at school & home-bound tutoring
Step 3: Full Day With Accommodations

Symptoms typically have decreased in both number and severity. Continue with accommodation plan, modifying whenever necessary.
Step 4: Full School Day, Full Activities, No Accommodations

- Develop academic “recovery” plan for completing make-up assignments
- Return to participation (physical activity) protocol can begin. Athletes should participate in graduated return to activity & sports only after clearance from approved medical professional
Minimize cognitive fatigue & headaches upon return

- 50% of academic workload commonly recommended during continued recovery
- Assignments (in-class & homework) should not be repetitive or redundant in nature
- Target critical or essential knowledge mastery assignments for completion
- Eliminate all other make-up assignments
Alleviate brain fatigue

✓ Checklists
✓ Task analysis lists
✓ Graphic organizers
✓ Schedules
✓ Fact sheets
✓ Multiple-choice & open-book testing formats
✓ Word banks & formula sheets
Alleviate brain fatigue

- One-on-one verbal question & answer
- Allow tutor, para-professional, or parent to prepare written assignments or reports
- Speech-to-text technology
- Break down assignments into small, manageable chunks that can be completed in 30 minutes or less
Alleviate brain fatigue

- Allow student to have water bottle at desk
- Provide extra time for completion of assignments
- Timelines to plan for projects & assignments
- Locker lock – key vs combination lock
Alleviate brain fatigue

- Critical knowledge mastery tests/quizzes should be delayed (especially standardized testing)
- Gradually introduce testing – only 1 test or quiz per day (if tolerated) until make-up assignments have been completed
Alleviate brain fatigue

- Allow student to take scheduled rest breaks in quiet location every hour for 10-15 minutes if symptoms recur
- Have lunch in a quiet, separate location with a few friends
- Utilize audio-books or arrange for others to read to the student
Sensitivity to light & noise

- Sunglasses & hat or visor
- Avoid noisy locations (cafeteria, assemblies, band, chorus, PE, etc.)
- Dismiss student early from class to avoid crowded, noisy hallways during class change-overs
- Headphones or ear buds to filter noise
- Avoid bus rides to & from school if possible
Dizziness (Vestibular issues)

- Allow extra time to get to class
- Walk with a peer or para-professional who can assist in carrying books or backpacks
- Teacher notes to prevent up & down shifting of student’s eyes. Have student follow along with highlighter for key concept recognition
- Review student notes during class to ensure comprehension & capture of key concepts
Social & Emotional

Early Worries
- School in general
- Falling behind with academic work
- Not allowed to participate in sports

Late Impacts
- Fear of being the only one “like this”
- Anxiety and depression
- Social isolation (peer pressure or hazing)
- Family stress
Be Prepared in Advance!

- It’s essential to have a comprehensive concussion management plan & support team in place
- Coordination among counselors, instructors, athletic trainer, school health nurse, and administrators is critical
- Frequent & consistent communication with the student & family
Consider this ...

You only get one opportunity to manage a concussion recovery the right way. The patience & extra effort extended to the student and family during the early stages of the recovery will ensure the long-term health & well-being of the student.

FULL recovery IS the PRIORITY!
Case Study 1

- 15 year old field hockey player
- Emergency Room evaluation – “mild” concussion; few days of rest prescribed
- CT scan normal
- Post-injury Concussion Vital Signs assessment indicative of significant concussive head injury
- Significant concussion confirmed by pediatric neurology concussion specialist
- Medically prescribed Return To Learn (RTL) protocol
Case Study 2

- 14 year old JV football player
- Passed sideline concussion assessment
- Initial Emergency Room evaluation non-remarkable / CT scan normal
- Post-injury Concussion Vital Signs assessment indicative of concussive head injury
- Significant concussion confirmed by pediatric neurology concussion specialist
- Medically prescribed Return To Learn (RTL) protocol
Questions & Answers