Welcome to today’s School Nurse Webinar

Return to Play Act of 2013 Webinar
September 27, 2013

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Disclosure Statement

Return to Play Act of 2013 Webinar
September 27, 2013
GNA# 2013-0830-01
Contact hours:1.0

• The Planners & Speakers for this program have declared no financial affiliations related to this topic.

• Successful completion of this program includes attendance at 100% program and completion of an evaluation with Survey Monkey:

https://www.surveymonkey.com/s/DRHNNQQQ
CONCUSSION:
The Facts and Controversy

David M Popoli, MD
Pediatric and Adolescent Sports Medicine
The Statistics

• 2008 (ED data)
  – 60 million youth 5-14 yr. in organized sports
  – 3.8 million concussions from sport and recreation
  – Underestimated due to under-reporting (1)

• 2009-2010 (H.S. Reporting Information Online)
  – 192 High Schools
  – 1056 Concussions
Objectives

• Define concussion
• Explain concussion pathway
• Discuss treatment and prevention
• Georgia Return to Play Act 2014
• Discuss controversies
Definition

- Consensus Guidelines 2012
- Characteristics
  1. Direct or impulsive force
  2. Rapid onset
  3. Functional
  4. Clinical symptoms
  5. No abnormality on standard imaging
This is Not a “Bump on the Head”
The Big Picture

CONCUSSION

Look on the Bright Side. For one brief, glorious moment, you forgot you were on the Cubs.
What’s Really Happening

Mechanical Injury leads to **Chemical Change**

- Twist/Stretch
- “Leaks”
- Electrical discharge
- Recharge
Assessment -- Symptoms

• Loss of Consciousness
• Amnesia, retrograde or anterograde
• Disorientation
• Appearing dazed
• Acting confused
• Forgetting game rules or play assignments
• Inability to recall score or opponent
• Inappropriate emotionality
• Physical incoordination
• Imbalance
• Seizure
• Slow verbal responses
• Personality changes
• Headache

• Headache
• Nausea or vomiting
• Difficulty balancing
• Vision changes
• Photophobia
• Phonophobia
• Feeling “out of it”
• Difficulty concentrating
• Tinnitus
• Drowsiness
• Sadness
• Hallucinations
### Assessment – What You’ll Be Told

<table>
<thead>
<tr>
<th>THINKING/REMEMBERING</th>
<th>PHYSICAL</th>
<th>EMOTIONAL/MOOD</th>
<th>SLEEP DISTURBANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty thinking clearly</td>
<td></td>
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<tr>
<td>Feeling slowed down</td>
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<tr>
<td>Difficulty concentrating</td>
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<tr>
<td>Difficulty remembering new information</td>
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<tr>
<td>Headache</td>
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<tr>
<td>Nausea or vomiting (early on)</td>
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<tr>
<td>Balance problems</td>
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<tr>
<td>Dizziness</td>
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<td>Fuzzy or blurry vision</td>
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<tr>
<td>Feeling tired, having no energy</td>
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<tr>
<td>Sensitivity to noise or light</td>
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<tr>
<td>Irritability</td>
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<tr>
<td>Sadness</td>
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<tr>
<td>More emotional</td>
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<tr>
<td>Nervousness or anxiety</td>
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<tr>
<td>Sleeping more than usual</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sleeping less than usual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trouble falling asleep</td>
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</tbody>
</table>
Assessment – What You’ll Be Told

• Symptoms
• School performance
• Activity tolerance
• Sleep
• Appetite
• Mood
Assessment – What You’ll See

• Mental status
• Coordination/Balance/Walking
• Strength
• Sensation
• Neuropsychological testing
Computerized Neuropsychological Testing

www.impacttest.com
Computerized Cognitive Testing

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Post Injury 1</th>
<th>Post Injury 2</th>
<th>Post Injury 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal Memory</td>
<td>90</td>
<td>80</td>
<td>95</td>
<td>90</td>
</tr>
<tr>
<td>Visual Memory</td>
<td>80</td>
<td>70</td>
<td>85</td>
<td>80</td>
</tr>
<tr>
<td>Processing Speed</td>
<td>70</td>
<td>60</td>
<td>75</td>
<td>70</td>
</tr>
<tr>
<td>Reaction Time</td>
<td>60</td>
<td>50</td>
<td>65</td>
<td>60</td>
</tr>
</tbody>
</table>

Percentile
Management

• Physical and cognitive rest
• Academic accommodations
• RTP stages
• Imaging*
• Medication*
Academic Accommodations

• Acute (Days 0-13)
  – Time off if needed and Letter of Accommodation and SST Meeting

• Sub Chronic (Days 14-28)
  – Facilitate Transition to Longer Term Accommodations if needed
    • 504 plans
    • Individualized Educational Program

• Chronic (Days 28+)
  – Engage other Specialties and Consider Additional Diagnosis
Georgia Return to Play Act
Georgia Return to Play Act

• All public and private schools which provide youth athletic activities are required:
  – Provide information to parents on the nature and risk of concussion and head injuries
  – Establish a concussion management and return to play policy to include:
    • An Information sheet prior to the beginning of each athletic season
    • Youth athlete must be removed from play if exhibiting symptoms
    • Youth athlete must be cleared by a healthcare provider before return to play

• Public recreational programs are also required to provide information to parents on the nature and risk of concussion and head injuries

• Georgia Department of Public Health shall endorse one or more concussion recognition education courses to inform Georgia citizens of the nature and risk of concussions in youth athletics

• Effective date: January 1, 2014
Georgia Return to Play Act

- To help schools & recreational leagues comply with the new law, Children’s concussion team has created resources to help with these new requirements.
  
  - Concussion Reference Guide
  - Educational Fact Sheets
  - Return to School & Activities Guideline
  - Guardian Concussion Notification Sheet

Visit choa.org/concussionlaw to download these materials.
Resources for Coaches and Schools

Concussions can happen anytime to any player, so it's important to be prepared. Here are some resources to help you recognize a concussion and get your players the help they need. If you suspect a concussion, players must be removed from the play and cannot return until they have been cleared by a healthcare provider.

Legislation Update

Beginning Jan 1, 2014, all public and private schools are required to create a concussion policy. This law also requires public recreational leagues to provide an information sheet to all youth athletes’ parents or legal guardians informing them of the risks of concussions. Learn more.

We offer the following resources that may help you with the new legal requirements:

NOTE: By downloading any of the following items you are acknowledging that you have read and agree to these terms.

Concussion reference guide: This document is intended to serve as a guideline or a user’s manual for local school boards and governing bodies. It covers a range of topics from the definition of a concussion and ImPACT® testing, to cognitive rest and your role in managing concussions.

Concussion policy: download and modify this template with your school or organization’s information.

Three-step concussion plan:

1. Educate—an educational fact sheet for parents and athletes (modify this version with your school or organization's name and logo)
2. Recognize the signs—sideline reference card for coaches and athletic trainers and the guardian concussion notification sheet
3. Return safely—return-to-school and activities guidelines to help educate teachers, nurses, coaches, athletic trainers, parents and athletes.
## Return to Play

<table>
<thead>
<tr>
<th>Stage</th>
<th>Exercise</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>None</td>
<td>Recovery</td>
</tr>
<tr>
<td>2</td>
<td>Light Aerobic</td>
<td>Increase HR</td>
</tr>
<tr>
<td>3</td>
<td>Sport-Specific</td>
<td>Add movement</td>
</tr>
<tr>
<td>4</td>
<td>Non-Contact Drills</td>
<td>Coordination</td>
</tr>
<tr>
<td>5</td>
<td>Controlled-Contact Drills</td>
<td>Restore Confidence</td>
</tr>
<tr>
<td>6</td>
<td>Full Contact Practice</td>
<td>Game Ready</td>
</tr>
<tr>
<td>7</td>
<td>Competition Play</td>
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Cumulative Effects

**Concussions prevalent among NFL’ers**

Exactly half of the 160 NFL players surveyed by The Associated Press, said they have had a concussion during their football careers.

1. Have you ever sustained a concussion that forced you to miss playing time?
   - Yes: 61
   - No: 95

2. Do you worry about getting a concussion more than other injuries?
   - Yes: 82
   - No: 78

3. Have you ever hidden or downplayed the effects of a concussion?
   - Yes: 30
   - No: 129

4. Have you followed the recent developments in the news about concussions and dementia among NFL players, including the recent congressional hearing on the topic?
   - Safer: 107

5. Do you think the game is significantly safer now than in the past, particularly with regard to the risk of concussions?
Chronic Traumatic Encephalopathy
Chronic Traumatic Encephalopathy

- Emotional
Chronic Traumatic Encephalopathy

- Emotional
- Cognitive
Chronic Traumatic Encephalopathy

- Emotional
- Cognitive
- Gait
Chronic Traumatic Encephalopathy

- Emotional
- Cognitive
- Gait
- Parkinsonism
Chronic Traumatic Encephalopathy

- Emotional
- Cognitive
- Gait
- Parkinsonism
- MND
Prevention

• Mouthguards
• Helmets
• Rules/regulations
• Style of play
More Information

- Children’s Healthcare of Atlanta
- Centers for Disease Control and Prevention