



Online Continuing Education Courses
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AOTA Approved Provider #4023

Course Title: Concussion 105

Subtitle: Pathophysiology of Sports Concussion

Course Description: Concussion pathophysiology is complicated and involves numerous mechanisms, including excessive neurotransmitter release, metabolic derangements, neuroinflammation, cerebral blood flow changes, and axonal disruption. The initial biomechanical impact in a concussion results in abnormal function at the cellular level, which initiates a cascade of events that leads to microstructural changes and, in the minority of cases, more persistent, permanent damage.

Target Audience: PT/PTA, OT/OTA and Other Healthcare Professionals

Course Length: 1 hour

Course Instructor: Brown, MS, OTR/L, CHT

Educational Level: Introductory, Intermediate, Advanced

The course is written at the intermediate level, but learners of all levels will benefit from the information.

Course Objectives:

At the end of the course, participants will be able to:

- Provide the most commonly accepted definition of “concussion” by McCrory
- Describe 3 mechanisms involved in the pathophysiology of sports concussion
- Describe cerebral blood flow changes that occur in sports concussion
- Outline 4 symptoms and the pathophysiology that occurs with sports concussion

Outline of Content:

Hour #1

- Key points
- Introduction
- Definition of concussion

1. Pathophysiology in Sports Concussion

- Neurotransmitter dysregulation
- Metabolic mismatch
- Neuroinflammatory response
- Cerebral blood flow changes
- Diffuse axonal injury

- Chronic pathophysiology
- Symptoms and pathophysiology
- Summary

Instructional Methods and Formats:

Online course available 24/7 at www.OnlineCE.com includes Audiovisual format and PDF downloadable handout. See course formats for additional details.

Course Completion Requirements:

A minimum passing score of 100% is required for course completion. You will have as many attempts as needed until your passing score of 100% is achieved. Upon successful completion of course, you will receive your certificate of completion.

Additional Policies:

OnlineCE Policies are available by clicking on the tab – Policies – located in the left-hand navigation bar.