Cerebral Happenings

Brain Injury Special Interest Group Newsletter



http://www.neuropt.org

Letter from the Chair Mary Beth Osborne, PT, DPT, NCS

Hello Brain Injury SIG members-

After taking over as Brain Injury SIG chair in July, I am happy to report that the leadership team has been working together getting acquainted and making plans for the membership. Here is a synopsis of things to look for:

- Combined Sections Meeting Programming—"Using Neuro Imaging to Understand Page 2-3 the Brain After Mild TBI" on Thursday from 3-5p by Michael Borich BA, DPT, PhD and Naznin Virji-Babul PT, PhD and "Interfacing with Virtual Rehab" on Saturday from 3-5p by Albert Rizzo PhD
 Page 4 Brain Injury Articles
- Member Survey—we have sent out a brief survey to the membership welcoming input Page 4 regarding the future of the SIG and interest in various projects
- 3. **Advocacy Papers**—we have plans to produce these and post on our website. Topics include depression and brain injury and interventions for people in RLA level 2-3
- 4. **Brain Injury SIG Video Conference Journal Club**—we will be offering a live journal club to members
- 5. **Membership connections**—we are making an effort to update our contact list to ensure our information is current so that we reach members of the SIG and build our pool of members interested in taking an active role

We will be having a brief business meeting during CSM where I welcome discussion and suggestions and look forward to meeting everyone. Please contact me with any suggestions, feedback, ideas, resources or anything you feel will make our SIG better.

Mary Beth A. Osborne PT, DPT, NCS

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Combined Sections Meeting 2015



The Combined Sections Meeting (CSM) focuses on programming designed by all 18 of APTA's specialty sections. The event brings together more than 10,000 physical therapy professionals from around the nation for 5 stimulating days of exceptional programming, networking opportunities, and an exhibit hall filled with products and services to keep you and your practice on the cutting edge.

Dates: February 3-7, 2014

Location: Indiana Convention Center, Indianapolis, IN



Courses of Interest:

Preconference – Tuesday and Wednesday, February 3-4 Neurology Section Comprehensive Concussion Management: "Need to Know" Information for Physical Therapists (2 day course; requires pre-registration to attend) Time: 8:00 am - 5:30 pm Main Conference Brain Injury Courses of Interest: (Please Refer to Official CSM Program for Room Locations) Thursday, February 5 Time: 11:00 am - 1:00 pm Effects of Brain-Derived Neurotophic Factor on Neuroplasticity Time: 3:00 pm – 5:00 pm Using Neuroimaging to Understand the Brain After Mild TBI Don't Forget: Alumni reception and events tonight! Friday, February 6 Time: 8:00 am – 10:00 am Sport-Related Concussion: Evidence-Based Assessment and Management Time: 11:00 am - 1:00 pm Sports Concussions in Youth: The Role of PTs for a Surging Patient Population Or On the EDGE of Possibilities: A Process to Identify Outcome Measures for Neurologic Physical Therapy Practice Time: 3:00 pm – 5:00 pm Neurology Section Platform Presentations II: Upper Extremity and Cognitive Don't Forget: Alumni reception and events tonight! Saturday, February 7 Time: 8:00 am - 10:00 am An Evidence-Based Aquatic Exercise Program for Patients With Neurological Disorders Or Vestibular SIG: Evaluation and Treatment of Visual Dysfunction Following Concussion: Concepts for Vestibular Physical Therapists Or Neuroplasticity in the Infant Brain: Structure & Function, Part I Time: 11:00 am – 1:00 pm Understanding the Unique Management Approach to Concussions in Female Athletes Or Neuroplasticity in the Infant Brain: Research & Treatment. Part II Educate, Train, Treat, and Track: State of the Art Care to Our Military With TBI Time: 3:00 pm – 5:00 pm Brain Injury SIG: Interfacing with Virtual Rehab

Brain Injury Articles

NeuroRehabilitation 32 (2013) 519–528 DOI:10.3233/NRE-130874 IOS Press

Vestibular rehabilitation following mild traumatic brain injury

James M. Gurley^{a,b,*}, Bryan D. Hujsak^c and Jennifer L. Kelly^c ^aPhysical Therapy Program, Mercy College, Dobbs Ferry, NY, USA ^bDepartment of Otololaryngology, James J. Peters VAMC, Bronx, NY, USA ^cVestibular Rehabilitation Department, New York Eye & Ear Infirmary, NY, USA

This review article summarizes application of vestibular rehabilitation to individuals following mild traumatic brain injury (mTBI) or concussion. Clinicians should recognize that people may have involvement of either the peripheral or central vestibular system and that recovery may require extended time for full recovery. Coordination with other members of a comprehensive team is a key to successful outcomes with this population.



http://www.apta.org/OpenDoor/



Jodi Krause, PT, DPT

Jodi Krause is a 2013 graduate from Ohio University's Doctor of Physical Therapy program. She completed her Neurologic Physical Therapy Residency at the University of Pittsburgh Medical Center- Centers for Rehab Services in November 2014. Jodi has a particular interest in concussion rehabilitation, and is currently working for UPMC as a neurologic/vestibular physical therapist and liaison for the concussion program at an outpatient facility in Pittsburgh. In addition to her time in the clinic, Jodi also enjoys running and has completed several half marathons and two full marathons.

Concussion Corner

Concussion Clinical Trajectories

This article discusses risk and prognostic factors for concussion outcomes, describes a comprehensive approach to assessment after concussion including providing guidance on targeted interview questions and assessment tools, and introduces a new model for conceptualizing treatment using clinical trajectories. The authors have categorized patients after concussion into six trajectories: cognitive/fatigue, vestibular, ocular motor, anxiety/mood, post-traumatic migraine, and cervical. They have also provided insight into identifying patients who fit into each trajectory and guidelines into the management of these patients.

Collins M, Kontos A, Reynolds E, Murawski C, Fu Freddie. A comprehensive, targeted approach to the clinical care of athletes following sport-related concussion. *Knee Surg Sports Traumatol Arthrosc.* 2014;22:235-246

https://pubmed.com/pubmed/24337463

Vestibular-Ocular Motor Screening for Concussion

This article describes a vestibular-ocular assessment tool for use in patients after concussion. It consists of five domains: smooth pursuits, horizontal and vertical saccades, near point of convergence distance, horizontal vestibular ocular reflex, and visual motion sensitivity. This vestibular-ocular motor screen, or VOMS, demonstrated internal consistency and sensitivity in identifying patients with concussion, and may help to augment current assessment tools used in concussion.

Mucha A, Collins M, Elbin R, Furman J, Troutman-Enseki C, DeWolf R, Marchetti G, Kontos A. A brief vestibular/ocular motor screening (VOMS) assessment to evaluate concussions: preliminary findings. *Am J Sports Med*. 2014;42(10:2479-86

https://pubmed.com/pubmed/25106780



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