## **CEREBRAL HAPPENINGS**

## BRAIN INJURY SIG NEWSLETTER

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## NEUROLOGY SECTION

## American Physical Therapy Association

## LETTER FROM THE CHAIR Hello Brain Injury SIG:

So nice to meet many of you at Combined Sections Meeting in Indianapolis and hope you enjoyed the programming. The leadership team has been working on the following projects:

- Online Journal Club: we had our first meeting in January and had about 10 attendees. We are working with the Vestibular SIG to offer a joint online journal club in May. See larger summary in the newsletter.
- 2. Facebook Page: visit our Facebook page. This is a great way to reach members and provide feedback or ask clinical questions to the group. We have 400 likes now, so

we are reaching a large number of you.

3. Advocacy Papers: the first paper can be found on our website (listed below) on Depression and Brain Injury. The second is expected out this summer on Disorders of Consciousness. If anyone is interested in contributing to the SIG by writing an advocacy paper, contact me

## <u>mbao@nc.rr.com</u>

- 4. **Elections:** a position for nominating committee and secretary are on the ballot. Please vote! Please feel free to offer feedback and suggestions or initiate discussion via our Facebook Page.
- Best—Mary Beth A. Osborne, PT, DPT, NCS

## SPRING EDITION

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## Officers:

#### <u>Chair</u>

Mary Beth Osborne, PT, DPT, NCS <u>mbao@nc.rr.com</u>

#### <u>Vice Chair</u>

Jennifer Fernandez, PT, DPT, NCS, PCS jennifer.fernandez@brooksreha b.org

#### <u>Secretary</u>

Melissa Mendoza, PT, MS, DPT, NCS <u>medozapt@mac.com</u>

## Nominating Committee

Becky Kerman, PT, NCS <u>bmkerman@u.washington.edu</u> Megan Richardson, DPT, MSPT <u>mmbarber22@hotmail.com</u> Jodi Krause, PT, DPT <u>krausejl@upmc.edu</u>

<u>Newsletter Co-editors</u> Jodi Krause, PT, DPT <u>krausejl@upmc.edu</u> Jillian Stark, PT, DPT, NCS, CBIS <u>jillian.a.stark@gmail.com</u>

## APTA NEXT CONFERENCE June 3-6, 2015

"NEXT is the leading-edge event for physical therapy professionals with trend-setting programming, innovative content, and exclusive access to the profession's forward thinkers. This year NEXT coincides with <u>PT Day on</u> <u>Capitol Hill</u>, giving you the chance to rally on Washington



with your peers and meet with your elected representatives."

<u>Location</u>: National Harbor, Maryland

http://www.apta.org/NEXT/Over view/ <u>Brain Injury-Relevant</u> <u>Programming</u>: Management of Concussions in Female Athletes (June 4)

#### BRAIN INJURY SIG HOSTS ITS FIRST JOURNAL CLUB

On January 29 the BI SIG hosted its first Online Journal Club, presented by SIG Chair, Mary Beth Osborne. Approximately 10 people attended to discuss the article by Erin Vasudevan et al entitled "Effects of Traumatic Brain Injury on Locomotor Adaptation" via Google Hangouts. The event was a success and included stimulating discussion about gait changes following TBI and how to detect and provide interventions to address. One of the authors, Andrew Packel was in attendance, which greatly enriched our discussion. Please stay tuned for future Journal Clubs. Announcements will be posted on the Facebook

page and the NeuroPT listserve. If you are interested in participating in a journal club or presenting at a journal club, please contact Mary Beth Osborne at <u>mbao@nc.rr.com</u>.

Link to article: http://www.ncbi.nlm.nih.gov/p ubmed/24892766

#### BRAIN INJURY SIG PUBLISHES ITS FIRST ADVOCACY PAPER

The Brain Injury SIG published its first advocacy paper on "Depression and Brain Injury." It can be found on the SIG website at <u>http://www.neuropt.org/speci</u> <u>al-interest-groups/brain-</u> injury. Advocacy papers are designed to educate patients, families, caregivers, physicians and other health care professionals on topics related to brain injury. The next anticipated advocacy paper will be related to exercise and brain injury. If you are interested in participating in the development of advocacy papers, please contact Mary Beth Osborne at mbao@nc.rr.com.

## CONCUSSION CORNER

## Predictors of postconcussive syndrome (PCS) after sports-related concussion in youth athletes: a matched case control study

This is a retrospective case-control study looking at 40 patients with PCS and aged and sexmatched controls. Demographic data, medical, psychiatric, and family history, and post-injury symptom features were used in a regression model to identify variables associated with PCS. History of prior concussion, premorbid mood and psychiatric disorders, and history of migraines were associated with developing PCS. These results may assist clinicians in identifying athletes who may have prolonged recovery times.

Reference: Morgan C, Zuckerman S, Lee Y, et al. Predictors of postconcussive syndrome after sports-related concussion in youth athletes: a matched case control study. J Neurosurg Pediatr. 2015; [Epub ahead of print] http://www.ncbi.nlm.nih.gov/pubmed/25745949

## <u>A pilot study of active rehabilitation for adolescents who are slow to recover from</u> <u>sport-related concussion.</u>

This study looked at the effectiveness of an active rehabilitation intervention which included gradual, light aerobic exercise, general coordination exercises, and mental imagery in ten adolescents who were symptomatic more than four weeks post injury. The participants continued the program until they had complete symptom resolution. After the intervention, the participants had a significant decrease in their post-concussive symptoms and had decreased fatigue and improved mood. These results suggest that post-concussive symptoms can be improved with an active rehabilitation intervention.

Reference: Gagnon I, Grilli L, Friedman D, and Iverson G. A pilot study of active rehabilitation for adolescents who are slow to recover from sport-related concussion. *Scand J Med Sci Sports*. 2015; [Epub ahead of print] http://www.ncbi.nlm.nih.gov/pubmed/25735821

## <u>Relationship between cognitive assessment and balance measures in adolescents</u> referred for vestibular therapy after concussion.

This study looked at the relationship between cognitive testing (ImPACT) and balance performance (ABC, DHI, FGA, gait speed, TUG, Five Times Sit to Stand, and Sensory Organization Test) in sixty patients with concussion. They found that performance on balance measures were significantly correlated with cognitive measures, however these were weak-tomoderate relationships and thus multiple domains of assessment are likely warranted in managing individuals after concussion.

Reference: Alsalaheen B, Whitney S, Marchetti G, et al. Relationship between cognitive assessment and balance measures in adolescents referred for vestibular physical therapy after concussion. *Clin J Sport Med*. 2015; [Epub ahead of print] http://www.ncbi.nlm.nih.gov/pubmed/25706663



### MEMBER SPOTLIGHT: MEGAN RICHARDSON



Megan Richardson is a Rehabilitation Coordinator for the Cheshire and Merseyside Rehabilitation Network in Liverpool,

England. It is a multifaceted role which involves close partnership working with the multidisciplinary team on key clinical decisions and acting as the key worker for a designated caseload of highly complex rehabilitation patients, and their families, to provide focused support throughout the inpatient rehabilitation stay.

For the past ten years, she has worked as a physiotherapist in England focusing primarily on Neurologic rehab within community, acute

hospital, inpatient rehabilitation and private practice settings. Megan earned her Doctorate of Physical Therapy in 2008 from Boston University whilst living and working abroad. Prior to moving across the pond, she worked for UC Davis Medical Centre and had graduated from Boston University's combined Master of Physical Therapy program. Megan maintains strong links with physical therapy practice in the United States. She has been on the Brain Injury Special Interest Group Nominating Committee for the past 2 years. She has travelled back to attend APTA conferences. She has also had a poster presentation at the British Society of Rehabilitation Medicine (BRSM) conference.

Outside of working hours, Megan is a keen traveller, likes live music, and has a Border Terrier named Pepper.





## Like us on Facebook!

## Brain Injury Special Interest Group of the Neurology Section of the APTA

We will communicate various SIG happenings including journal clubs and other activities via our Facebook page.