



**Short Communication**

Volume 1 Issue 1 - March 2017  
DOI: 10.19080/JPFMTS.2017.01.555552

**J Phy Fit Treatment & Sports**

Copyright © All rights are reserved by Lilian Felipe

# Balance Disorders and Concussions

**\*Lilian Felipe**

*Department of Speech and Hearing Sciences, Lamar University, Fluminense Federal University, South America*

**Submission:** March 10, 2017; **Published:** March 17, 2017

**\*Corresponding author:** Lilian Felipe, Department of Speech and Hearing Sciences, Lamar University, P.O. Box 10076 Beaumont, TX 77710, Fluminense Federal University, Rio de Janeiro, R. Dr. Silvio Henrique Braune, 22, Nova Friburgo - RJ, 28625-650, Brazil, South America, Tel: (22) 25287168; Email: lilianfelipe@id.uff.br

## Short Communication

Concussion is a traumatically induced transient disturbance of brain function and involves a complex pathophysiological process. According literature, the frequent correlated symptoms after a concussion are headache, dizziness, postural disturbances/imbalance and neck pain. The balance disorders occurrence is between 40% and 80% and it is growing as a health concern. Concussion occurs in all sports, with the highest incidence in: football, soccer, hockey, boxing, rugby and basketball. In the existence of concussion and dizziness, the defiance is identifying the original cause and establishes an appropriate diagnosis. Concussion management and treatment of balance impairments in athletes should be assessed in an inchmeal, from initial impact to resolution of symptoms. Sports medicine physicians and a multidisciplinary approach with specific training and experience in the assessment and management of concussion are frequently involved in the attention of patients with sports concussion. The diagnosis involves physical and cognitive evaluation, followed by a planned and progressive return to physical activity. If symptoms are prolonged, impaired neuronal mechanisms or irreversible cerebral injury may motivate determined symptoms and cognitive deficits seen in neurocognitive testing [1-5].

Management protocols are currently focused on customized assessment of neurocognitive and comprehensive symptomatic evaluations. It is not clear if the dizziness experienced post-concussion is from peripheral or central etiology. New technology has been created to prompt and simply quantify the degree of peripheral vestibular disorders. It is broadly accepted that neurocognitive and resolution of concussion-induced symptoms requisite priority to return to sport or play and therefore, the athlete should be reassessed and treated until symptoms resolved. Future directions in the evaluation, diagnosis and treatment of sports-related concussion add in enhance research on occurrence proportions and effects of concussions for females and younger groups, family educating and post-concussion cognitive evaluation, with a peripheral

and central vestibular system and balance assessment. Primary prevention of some injuries could be likely with modification and implementation of the guidelines and fair play. Legislative efforts will make available an uniform standard for sports organizations about concussion safety and management [6-10].

## References

1. Brolinson PG (2014) Management of sport-related concussion: a review. *Clin J Sport Med* 24(1): 89-90.
2. BD Bushnell (2014) Commentary on "knowledge and management of sports concussions among coaches and certified athletic trainers in Alabama". *South Med J* 107(7): 424-425.
3. Faizullin I, Faizullina E (2015) Effects of balance training on post-sprained ankle joint instability. *Int J Risk Saf Med* 27(1): S99-S101.
4. Kimberly G Harmon, Jonathan A Drezner, Matthew Gammons, Kevin M Guskiewicz, Mark Halstead, et al. (2013) American Medical Society for Sports Medicine position statement: concussion in sport. *Br J Sports Med* 47(1): 15-26.
5. Langelier DM, Schneider KJ, Hurlbert J, Debert CT (2017) The importance of a neck exam in sport-related concussion: Cervical schwannoma in post concussion syndrome. *Phys Ther Sport pii: S1466-853X(17)30018-4*.
6. Drew A Murray, Dara Meldrum, Olive Lennon (2017) Can vestibular rehabilitation exercises help patients with concussion? A systematic review of efficacy, prescription and progression patterns. *British Journal of Sports Medicine* 51(5): 442-451.
7. Pellman EJ, Powell JW, Viano DC, Casson IR, Tucker AM, et al. (2004) Concussion in professional football: epidemiological features of game injuries and review of the literature-part 3. *Neurosurgery* 54(1): 81-94.
8. Reneker JC, Cheruvu V, Yang J, Cook CE, James MA, et al. (2015) Differential diagnosis of dizziness after a sports-related concussion based on descriptors and triggers: an observational study. *Inj Epidemiol* 2(1): 22.
9. Sawyer Q, Vecsi B, McLeod TC (2016) Physical Activity and Intermittent Postconcussion Symptoms after a Period of Symptom-Limited Physical and Cognitive Rest. *J Athl Train* 51(9): 739-742.
10. Skobska OE, Kadzhaya NV, Andreyev OA, Potapov EV (2015) Characterization of Vestibular Disorders in the injured persons with brain concussion in acute period. *Klin Khir* (4): 49-51.



This work is licensed under Creative Commons Attribution 4.0 License  
DOI: [10.19080/JPFMTS.2017.01.555552](https://doi.org/10.19080/JPFMTS.2017.01.555552)

**Your next submission with Juniper Publishers  
will reach you the below assets**

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats  
**( Pdf, E-pub, Full Text, Audio)**
- Unceasing customer service

**Track the below URL for one-step submission**

<https://juniperpublishers.com/online-submission.php>