

## 2<sup>nd</sup> International Conference and Exhibition on Physical Medicine & Rehabilitation

July 14-16, 2014 DoubleTree by Hilton Baltimore-BWI Airport, USA

## Asymmetric exercises and motor control of the hip and pelvic girdle: Optimizing the rehabilitation for femur instabilities

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The femoral instability is one of the most common signals found in patella femoral syndrome, and, clinically, excessive femoral adduction during dynamic activities can cause weakness or failure of hip abductor muscles, especially to the gluteus medius, to the upper fibers of the gluteus maximus. Another component, an excessive internal rotation can be caused by weakness or inactivity of the external rotator muscles of the hip. As a predisposing factor, this internal rotation leads to patellar misalignment and early degeneration. Protocols of strength are routinely used to treat this condition; however, exercises that target proprioceptive stimulation are not easily available in the literature. Considering that many joints may be involved, the objective of this conference is to show the electrical muscle response through dynamic and eccentric exercises in situations where the proprioceptive stimulus (asymmetrically applied) associated to Pilates based breathing technique was prioritized instead of strength and/or endurance training, providing evidence to use such protocol to stabilize the segment.

## **Biography**

Alexandre Wesley Carvalho Barbosa has completed his PhD at the age of 35 years from Italian University Institute of Rosario (in Biomedical Sciences). He is the coordinator of the Electromyography and Orthopedic Research Group. He has published more than 20 papers in reputed journals and has been serving as an editorial board member of repute.

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