

7TH GAIT AND BRAIN SEMINAR SERIES

TUESDAY, OCTOBER 22, 2013

St. Joseph's Health Care London, Parkwood Hospital, Parkwood Boardroom C215

Dual-task, motor imagery and brain imaging: different but complementary ways to assess higher levels of gait control



Guest Speaker - Dr. Cedric Annweiler

Associate Professor, Internal Medicine and Geriatrics, Faculty of Medicine, Angers, France; Chief, Division of Acute Geriatrics, Angers University Hospital

Dr. Annweiler is a geriatrician, internist and experienced researcher in the field of gait changes, vitamin D and neuroimaging. He demonstrated, in collaboration with the Gait

and Brian Study, that there is a neurochemical substrate of gait problems associated with aging and cognitive decline. His research findings have been published in high-impact factor journals in the field of geriatrics and neurology including *Neurology* and *Brain*. His field of research concerns vitamin D deficiency, the role of vitamin D and cognition, and how it may affect gait, balance and cognitive disorders in older adults. The main clinical implications of his research are related to the potential treatments of cognitive and mobility decline.

Dr. Annweiler will be presenting recent evidence demonstrating that dual-tasking assessment is a useful paradigm for evaluating the interrelationships between gait and cognition. "Normal walking" is not automatic; it has been demonstrated that cognition plays a key role in the normal regulation of walking and balance, particularly in older adults. This essential relationship becomes most evident in people with cognitive impairment where gait or balance performance is adversely affected by any extra cognitive load. Observing people during a gait or balance task while they perform a secondary cognitive task (the dual-task paradigm), such as "walking while talking", is an accepted way to assess the interaction between cognition and mobility in older people. Recently, it has been demonstrated that the same neurotransmitter affecting cognition (acetylcholine) has an impact on gait performance. This is a very relevant topic due to the potential implication for pharmacologic interventions to prevent mobility and cognitive decline in older adults.

Agenda

2:30

Introduction by
Dr. Manuel Montero-
Odasso, MD, PhD

3:00

Lecture,
Dr. Cedric Annweiler

4:00

Question & Answer

4:20

Evaluations

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Learning Objectives

1. Understand the role of cognition in mobility declines and falls.
2. Describe how new imaging techniques may detect the neurochemical substrate of gait control.
3. Discuss how gait performance is affected by dual-tasking in older adults.

Sponsors

Division of Geriatric Medicine, Department of Medicine, at the Schulich School of Medicine & Dentistry, Western University.

Acknowledgements

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Study Credits

This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification program of The Royal College of Physicians and Surgeons of Canada and approved by Continuing Professional Development, Schulich School of Medicine & Dentistry, Western University (___ hours).

Each participant should claim only those hours of credit that he/she actually spent participating in the educational program.

Seating is Limited

Please RSVP to Jen Whytock:
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or call Judy McCallum or
Wendy Parisian at 519.685.4021.