

**22nd International Conference on
Neurology and Neurophysiology**

&

**23rd International Conference on
Neurology and Neurosurgery**

April 23-24, 2018 Rome, Italy

Clinical and pathophysiological considerations of gait limitations and high prevalence of falls, in elderly with most common, disabling neurological diseases – mini review**Aurelian Angheliescu^{1,2} and Anca Magdalena Magdoiu³**¹Teaching Emergency Hospital Bagdasar-Arseni, Romania²Carol Davila University of Medicine and Pharmacy, Romania³CMI Dr Magdoiu Anca Magdalena, Bucharest, Romania

Age-related gait and balance disturbances represent one of the most common geronto neurological symptoms, with different etiology and clinical pathological features (antalgic gait, paretic, spastic, ataxic, sensory deficit, hypokinetic, dyskinetic, anxious, and psychogenic) and often lead to falls in seniors. The pathogenesis of gait disorders include sensory deficits (visual, vestibular, somatosensory), neurodegenerative processes (cortical, extrapyramidal, cerebellar), cognitive degradation, depression and anxiety (primary or concerning falls), orthostatic hypotension, cardiac arrhythmia or insufficiency, adverse effects of medication, toxic factors (alcohol). Physiopathological basis of gait and balance dysfunctions is better understood with modern neuroanatomical mapping technique (diffusion-tensor tractography, DTI). The authors make a review of the literature regarding age and gender-related effect on microstructural topographic degeneration of the white matter (WM), respectively the disproportionate myelin alterations (density and topography) in different pathological neurologic entities: stroke, Parkinson's disease, leuconevraxis, cerebral small vessel disease, Alzheimer. For geronto neurological impaired people, falling represent an important cause of injury, disability, even death, and a major public health problem. Prevention is better than cure, and can considerably reduce the psychological and physical morbidity, and the dependence on family care, social support and healthcare services. A targeted and adequate prophylaxis with multilevel interventions at endogenous and/or exogenous pathological items, addressing general public and community-dwelling elderly in prevention programs focused to raise awareness, represent the real cure for injurious falling.

Biography

Aurelian Angheliescu is a founding member (2007) and Prime Vice-President of the Romanian Society for Neurorehabilitation (RoSNeRa) - affiliated to WFNR; Romanian Spinal Cord Society (RoSCoS) - affiliated to ISCoS and ESCIF and; member of the International Spinal Cord Society (ISCoS, since 2000), World Federation for Neurorehabilitation (WFNR, since 2008). He is Coordinator of Romanian team in five international projects and participated in four national projects. He is co-author of two patent certificates (appointed by Romanian State Office for Inventions and Marks, OSIM), nine books, and over 70 published papers. He is actively implied in national educational prophylactic interventions, aimed to prevent severe central nervous lesions.

aurelian_angheliescu@yahoo.co.uk

Notes: