BioMed Research International

Special Issue on
Alzheimer's Disease and Cognitive Frailty: Novel Therapeutic Technologies

CALL FOR PAPERS

Alzheimer's disease (AD) is frequently diagnosed in people over 65 years of age, although the less-prevalent early onset AD can occur much earlier. Since AD gradually renders people incapable of tending to their own needs, at present, caregiving appears to be a likely more effective means to help with the management of the disease.

During the early and moderate stages of AD, modifications to the living environment and lifestyle can increase patient safety and reduce caregiver burden. An important question refers to the relationship between quality of life and quality of care and safety in daily living activities of AD patients, considering that the home care is usually preferred by patients and families.

AD is actually considered as a continuum of disease from preclinical asymptomatic to overt, symptomatic stages. Cognitive frailty may represent a precursor of neurodegenerative processes. A potential for reversibility may also characterize this entity. A psychological component of the condition is evident and concurs at increasing the vulnerability of the individual to stressors.

Cognitive frailty refers to the heterogeneous clinical syndrome that is found in elderly individuals, excluding those with AD and other dementias, that is characterized by concurrent physical frailty and potentially reversible cognitive impairment (MCI (mild cognitive impairment)).

Risk factors for cognitive frailty and AD appear to change with age. Most of the overelderly individuals have beta-amyloid (Aβ) plaques, by extension most overelderly people have AD. Also, since most young individuals will develop Aβ deposits if they live long enough and, almost the entire population that does not already have AD is on their way to developing AD, according to the preclinical AD criteria, therefore, it is difficult to see how brain amyloidosis and brain aging could be considered separate entities arising through independent mechanisms.

The central focus of this Special Issue will be to advance novel therapeutic technologies that have shown exceptional promise in clinical models of AD and cognitive frailty. The aim will be to individualize genetic and clinic mechanisms of AD and cognitive frailty considering age-related and multidimensional approaches to the purpose of appropriate and personalized treatment, also with the use of information and communication technology (ICT) tools that can decrease the hospitalization and increase the permanence at home.

The pharmacologic treatment delivers limited symptomatic benefits, so the provision of nonpharmacological treatments in addition to standard outpatient care is an asset of good clinical practice.

Therefore prognostic evaluation of AD patients plays a key role in the decision analyses of care processes including the organization of social health care system, the support to families, caregivers, and patients as well as the choice of appropriate treatment.

Potential topics include, but are not limited to:

- Immune regulation (e.g., chronic inflammation) of AD and cognitive frailty
- Endocrine regulation of AD and cognitive frailty
- Sarcopenia and AD
- Cardiocerebral vascular disease and AD
- The effects of emotional and affective dimensions on cognitive reserve decline
- The multidimensional screening of AD and cognitive frailty
- The interventions of AD and cognitive frailty
- Secretase-based drugs in Alzheimer's disease
- CYP2D6 polymorphism on the efficacy of pharmacologic treatments in AD
- Effect of other gene polymorphism on efficacy of acetylcholinesterase inhibitors in AD
- Occupational therapy interventions for the management of behavioral and psychological symptoms of dementia
- Cognitive and functional rehabilitation for patients with mild cognitive impairment and AD
- Psychodynamic psychotherapy for family caregivers of AD patients
- Technology innovation in the integrated approach to the elderly with AD

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/bmri/geriatrics/adcf/.

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graziadonofrio@libero.it

Guest Editors
Yu Zhuowei, Shanghai Institute of Geriatrics and Gerontology, Shanghai, China
qingweir@aliyun.com

Orestes V. Forlenza, University of São Paulo, São Paulo, Brazil
forlenza@usp.br

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