A synopsis on the linkage between age-related dementias and vascular disorders

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The concept of age-related dementias and vascular disorders has now been recognized for over a century. In the present review, we have emphasized on the causes, consequences and the true bases for the treatment and prevention of these disorders. Systematic efforts have been put together to identify the aetiology in each case. Increased efforts have been targeted towards the concept and genetic factors responsible for vascular cognitive impairment and post-stroke dementia in relation with Alzheimer?s disease, which is a consequence of age-related dementia, especially as they hold promise for early prevention and treatment. It has now been well accepted that vascular dementia is not a single disease but a group of conditions with different pathological correlations and pathophysiological mechanisms. The present review represents an amalgamation of several pathophysiological mechanisms producing a very heterogeneous clinical presentation for developing such consequences. We suggest current diagnostic categories and describe clinical parameters according to recently reported studies that document the demographic data in a standardized manner for age-related dementia disorders. © 2016 Bentham Science Publishers.

Mitochondrial lesion

Post stroke dementia Reactive oxygen species Vascular dementia

donepezil

galantamine

Ginkgo biloba extract

huperzine A

nitric oxide

reactive oxygen metabolite

rivastigmine

apoptosis

brain ischemia

cognitive defect

dementia

environmental factor

gene mutation

human

meta analysis (topic)

mitochondrial permeability

multiinfarct dementia

nerve cell plasticity

nonhuman

oxidative phosphorylation

pathogenesis

phenotype

protein expression

Review

signal transduction

vascular disease

aging

Alzheimer disease

animal

cerebrovascular accident

Cognitive Dysfunction

dementia

Dementia, Vascular

metabolism

pathology

Vascular Diseases

Aging

Alzheimer Disease

Animals

Cognitive Dysfunction

Dementia

Dementia, Vascular

Humans

Stroke

Vascular Diseases