EPIDEMIOLOGY AND DEFINITION OF POST STROKE COGNITIVE IMPAIRMENT

Didier Leys
INSERM U 1171. University of Lille. France.

Background. Post stroke Cognitive Impairment (PSCI) is any cognitive impairment present after a stroke, irrespective of its cause, and causal relationship with stroke. Stroke and cognitive impairment are frequent and their association is not just due to chance, but to the summation of vascular and degenerative lesions, and their interaction.

Method. We reviewed the incidence and prevalence of PSCI and their main risk factors.

Results. Many cases of PSCI are the consequence of pre-existing cognitive impairment. Depending on the case-mix and study design, the prevalence of pre-stroke dementia ranges from 9% (population-based data) to 14% (hospital-based data). Many more patients have cognitive impairment no dementia before stroke. The incidence of post stroke dementia at 1 and 5 years, ranges from 7% to 10% in patients with first-ever strokes, and from 18% to 30% in patients with any kind of stroke. One year after stroke, the prevalence of dementia varies from to 7% in population-based studies, when patients have a first-ever strokes and no pre-stroke dementia, to 41% in hospital-based studies, when patients have recurrent strokes and pre-stroke dementia are not excluded. The predictors of post stroke dementia are increasing age, low education level, pre-existing cognitive impairment no dementia, presence of vascular risk factors, early epileptic seizures, “silent” lesions of the brain, stroke recurrence, and location of stroke. Most PSCI are due to the co-existence of vascular and Alzheimer changes.

Conclusion. PSCI is an important complication of stroke that can be prevented in many cases.