Cognitive assessments for the early diagnosis of dementia after stroke

ABSTRACT

The early detection of poststroke dementia (PSD) is important for medical practitioners to customize patient treatment programs based on cognitive consequences and disease severity progression. The aim is to diagnose and detect brain degenerative disorders as early as possible to help stroke survivors obtain early treatment benefits before significant mental impairment occurs. Neuropsychological assessments are widely used to assess cognitive decline following a stroke diagnosis. This study reviews the function of the available neuropsychological assessments in the early detection of PSD, particularly vascular dementia (VaD). The review starts from cognitive impairment and dementia prevalence, followed by PSD types and the cognitive spectrum. Finally, the most usable neuropsychological assessments to detect VaD were identified. This study was performed through a PubMed and ScienceDirect database search spanning the last 10 years with the following keywords: "poststroke"; "dementia"; "neuro-psychological"; and "assessments". This study focuses on assessing VaD patients on the basis of their stroke risk factors and cognitive function within the first 3 months after stroke onset. The search strategy yielded 535 articles. After application of inclusion and exclusion criteria, only five articles were considered. A manual search was performed and yielded 14 articles. Twelve articles were included in the study design and seven articles were associated with early dementia detection. This review may provide a means to identify the role of neuropsychological assessments as early PSD detection tests.

Keyword: Poststroke dementia; Vascular dementia; Neuropsychological assessments; Early dementia detection