

Assessment and clinical implications of cognitive impairment in acutely ill geriatric patients using a revised simplified short-term memory recall test (STMT-R)

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Background: Cognitive dysfunction due to delirium or dementia is a common finding in acutely ill geriatric patients, but often remains undetected. A brief and sensitive clinical identification method could prevent errors or complications while evaluating the mental status of elderly patients.

Aims: To evaluate the usefulness and clinical implications of the revised simplified short-term memory recall test (STMT-R) in geriatric patients admitted in the emergency department; with age, gender, dementia history, serum albumin, underlying diseases and clinical outcome used as comparative factors.

Methods: Mini-mental state examination and STMT-R scores were initially compared, and a positive correlation was observed ($r=0.66$, $p<0.001$). Subsequently, 885 inpatients aged over 50 years underwent STMT-R evaluation between October 2014 and September 2015. We considered as cognitive dysfunction STMT-R scores ≤ 4 of a maximum score of 8.

Results: Among enrolled patients, 52.2% were female and the mean age was 78.9 years. There were 159 patients who were unable to complete the test (incomplete

testing group). We observed cognitive dysfunction in 460 patients, while 266 did not have cognitive dysfunction. There were significant differences between those with and without cognitive dysfunction in terms of age, dementia history, underlying respiratory diseases, and hospital outcome.

Conclusion: Cognitive dysfunction at admission can have a negative effect on the hospital outcomes of elderly patients. Age, a history of dementia and underlying respiratory diseases may also influence cognitive functional decline.

Biography

Dr Hiroshi Yamamoto is the Director of Yamamoto Memorial Hospital, Imari-city, Japan. He completed his PhD from Kurume University medical department graduate school. He is also a member of Japanese Surgical Association and Gerontological Society of America. His major research interests are acute care and hospitalization of geriatrics. He published many research papers related to the field of ageing science and geriatrics.

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