The relationship between Executive Dysfunction and Instrumental Activities of Daily Living in early-stage dementia

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Background:
The key clinical features of early symptoms of dementia・Cognitive deficits in everyday activities (Marshall GA.,2011)・Executive dysfunction not only Memory impairment (Espinosa A.,2009)

Objective:
To investigate the relationship between Executive dysfunction and Instrumental activities of daily living (IADL) in early-stage dementia

Participants: 29 patients (6 male & 23 female), MMSE score>20

Methods:
Executive function assessment Behavioral Assessment of Dysexecutive Syndrome (BADS) (Figure 1: Wilson BA.,1996)
The BADS includes 6 subtests & 2 forms of the Dysexecutive Questionnaire (DEX).
The DEX comprises DEX self-rating (patients) & DEX other-rating (caregivers).
Instrumental ADL (IADL) assessment IADL scale (range 0-8) (Lawton MP.,1969)

Ethical considerations
This study was approved by University of Tsukuba Faculty of Medicine.

Conclusions:
・Executive dysfunction was associated with decline of IADL in early-stage dementia, regardless of the diagnosis of dementia.
・Evaluation of executive function & IADL by caregivers was a significant assessment.
・We suggest nurses should assess executive function using BADS.

Results:
Patient data: 13 AD (Alzheimer disease), 13 DLB (Dementia with Lewy bodies), 3 suspected dementia

BADS overall classification: 18 impaired, 5 borderline, 2 low average, 4 average.

Correlation between BADS & IADL (Figure 2)

Findings:
・BADS-TP & 4 subtests were significantly correlated with IADL.
・DEX-other was significantly correlated with BADS-TP & IADL.

Conclusions:
・Executive dysfunction was associated with decline of IADL in early-stage dementia, regardless of the diagnosis of dementia.
・Evaluation of executive function & IADL by caregivers was a significant assessment.
・We suggest nurses should assess executive function using BADS.