COGNITIVE IMPAIRMENT OF ISCHAEMIC STROKE INPATIENTS IN ZAINOEL ABIDIN HOSPITAL BANDA ACEH

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BACKGROUND

Stroke can lead to both physical disorder and cognitive impairment. Attention, language, memory, visuospatial, and executive function are cognitive domains that can be affected. The assessment of cognitive function can be fundamental to initiate cognitive rehabilitation as early as possible. This study aims to obtain the cognitive impairment of ischaemic stroke inpatients in Zainoel Abidin Hospital Banda Aceh

METHODS

This study used the descriptive method with cross sectional design. Respondents consisted of 30 ischaemic stroke inpatients in Zainoel Abidin Hospital in April to December 2018. MMSE and MoCA-INA assessment tool were used to assess cognitive function.

RESULTS AND DISCUSSION

The majority of ischaemic stroke patients had cognitive impairment are male (53,3%). Men tend to have unhealthy lifestyle rather than woman. The majority of age group is >66 years (33,3%). It shows the cognitive impairment rate is increased in elderly because of the impairment of brain function due to brain atrophy. The majority of education group is elementary school graduate (40%). It shows the higher the education, the lower the risk of cognitive impairment because brain plasticity can be obtained during educational process, where the neurons are activated and stimulated in order to develop to determine the cognitive function. The majority of MMSE score is 17-23 (36,7%) in which the most affected cognitive domain is memory (93,3%). The majority of MoCA-INA score are 10-19 and 0-9 (36,7%) in which the most affected cognitive domains are visuospatial, executive functions, and memory (94%). The difference shows the MoCA-INA is more sensitive than MMSE in detecting the cognitive impairment in stroke patients. Cognitive impairment is the predictor of dementia.

Variable	Category	Total (n)	Percentage (%)
Sex	Male	16	53,3
	Female	14	46,7
Age (years)	26-35	1	3,3
	36-45	4	13,3
	46-55	8	26,7
	56-65	7	23,3
	>66	10	33,3
Education	Elementary	12	40
	Junior High School	3	10
	Senior High School	8	26,7
	Bachelor	7	23,3
MMSE Score	24 – 30 (Normal)	9	30
	17 – 23 (Probable)	11	36,7
	0 – 16 (Definite)	10	33,3
Affected MMSE Domains	Orientation	23	76,7
	Attention and Calculation	27	90
	Memory	28	93,3
	Language	12	40
	Visuospatial	11	36,7
MoCA-INA Score	26 – 30 (Normal)	3	10
	20 – 25 (Mild)	5	16,7
	10 – 19 (Moderate)	11	36,7
	0 – 9 (Severe)	11	36,7
Affected MoCA-INA Score	Visuospatial and Executive Functions	26	86,7
	Naming	8	26,7
	Attention	23	76,7
	Language	24	80
	Abstraction	20	66,7
	Memory	26	86,7
	Orientation	20	66,7

CONCLUSION

Every practitioner should be able to assess the cognitive impairment of ischaemic stroke patients, thus the cognitive rehabilitation can be initiated as early as possible. MMSE and MoCA-INA assessment tools are sensitive screening test to detect the cognitive impairment in post-stroke patients and can be used simultaneously.

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