ABSTRACT

COMPARISON OF THE DEGREE OF DISABILITY OF ACUTE ISCHEMIC STROKE PATIENTS IN SMOKERS AND NON-SMOKERS MEASURED BY CANADIAN NEUROLOGICAL SCALE (CNS) AND NIHSS AT DR. SOETOMO GENERAL HOSPITAL SURABAYA

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Introduction. Stroke is the second leading cause of death in the world after heart disease and is a major cause of disability. Smoking is a well-known risk factor which may increase the risk of ischemic stroke by 2-3. However, the correlation between smoking and stroke outcome is still remains a controversy. Thus, the aim of this study is to analyze the differences of the degree of disability between smokers and non-smokers in acute ischemic stroke patients, measured by Canadian Neurological Scale (CNS) and NIHSS.

Method. The design used in this study was retrospective cross-sectional. Differences of Canadian Neurological Scale (CNS) and NIHSS was analyzed using Mann-Whitney U test.

Result. This study included 43 patients with acute ischemic stroke on their first attack. The mean age of study subjects was 56.30 ± 9.89 years. There were 23 male patients (53.5%) and 20 female patients (46.5%) with 13 patients are smokers and 30 patients are non-smokers. There were no female smokers in this study, thus only the male group’s CNS and NIHSS value were analyzed. Means of CNS in smokers and non-smokers were 8.62 ± 2.69 and 9.55 ± 1.98, respectively. Median of NIHSS in smokers and non-smokers were 4.0 and 3.0, respectively. There were no significant differences in the analysis of CNS score between smokers and non-smokers (p = 0.446) and NIHSS score analysis between smokers and non-smokers (p= 0.522).

Conclusion. Smoking does not affect the degree of disability in acute ischemic stroke patients measured by CNS and NIHSS.

Keywords: ischemic stroke; NIHSS; Canadian Neurological Scale; degree of disability; smoking.