ABSTRACT

Stroke is one of non-communicable diseases (NCD) with the number of patients continues to increase from year to year, and occurs in young and old age. This study aimed to determine the risk factors that affect the incidence of stroke in young patients in Brawijaya Hospital Surabaya.

This study was conducted using case control design with retrospective approach. Data were taken as secondary data from medical records of Brawijaya Hospital Surabaya 2012-2013. Variables included age at onset of stroke, gender, hypertension, obesity, cholesterol levels, and diabetes mellitus. Samples were the whole young stroke patients of <50 years and control sample were of stroke patients ≥50 years of age. Total number of samples was 60. Comparison of cases with controls was 1 : 3. Sampling technique control cases was simple random sampling. Analysis was performed using logistic regression test (α = 0.05) for univariate and bivariate. Multivariate analysis was done using logistic regression fold..

Most of the samples of ≥50 years old were 75%, male 55%, hypertensive 85%, non obese 51.7%, increased cholesterol levels 58.3%, and DM 53.3%. There were five variables as risk factors, but four factors did not affect the incidence of stroke in young age: sex p = 0,881, hypertension p = 0.987, cholesterol level p = 0,403 and diabetes mellitus p = 0.236. As the affecting risk factors, obesity p = 0,015, and in multivariate variables obesity p = 0.009 (α<0.05).

In conclusion, each variable separately do have effect, one variable affect the incidenceas a whole. It is not necessarily an individual has obesity, diabetes mellitus and high cholesterol altogether, because all three are different types of disease or condition. Obesity, cholesterol levels, diabetes mellitus should become a concern since they are risk factors for early age stroke.

Keywords: risk factor, stroke, obesity

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