Relationship Between Left Ventricular Hypertrophy on Electrocardiogram and Mini Mental State Examination in Atherothrombotic Infarction StrokePatient with Risk Factor Hypertension

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Abstract

Statement of the Problem: Stroke is a cause of disability in surviving patients, one of which is impaired cognitive function. Hypertension as a risk factor for stroke becomes one of the factors causing the decline in cognitive function. The condition of chronic hypertension will cause left ventircular hypertrophy (LVH). Left Ventricular hypertrophy is an advanced complication of hypertension. Based on previous research, it is known that stroke due to hypertension will be higher risk of decreased cognitive function. The purpose of this study is to determine the relationship between LVH on electrocardiogram with mini mental state examination of atherotrombotic infarctionstroke.
Methodology & Theoretical Orientation: This study was an unpaired categorical analytical study, with cross sectional study design. This study was conducted from May until June 2017. Samples were obtained from all medical records of stroke patients of Department of Neurology Dr Hasan Sadikin for the last five years. Patients diagnosed LVH if on EKG examination resultswritten LVH+, while the patient's cognition status was categorized into MMSE <24 and MMSE≥24. Chi-square test was used to find the relationship between cognitive function and LVH

Findings: Five years of medical record search obtained 274 data. The proportion of MMSE score <24 was 24,5%, while the proportion of LVH incidence was 83.6%. The analysis using chi-square test showed significant relationship between LVH incidence with minimental status score, with p value = 0.023..
Conclusion & Significance: There was relationship between the occurrence of left ventricular hypertrophy on the electrocardiogram with the mental mini status of stroke atherothrombotic patients.

Table

Table 2 Association Distribution of LVH in ECG Result and MMSE

		Nilai MMSE				Total	P value
		Score <24		Score ≥24			
		N	%	N	%		
Hasil EKG	LVH +	50	21,8	179	78,2	229	0,023
	LVH −	17	37,8	28	62,2	45	
Total		67	24,5	207	75,5	274	

EKG, elektrokardiogram; LVH, *left ventricular hypertrophy*; MMSE, *mini mental state examination*.

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Biography

Amrina Rosyada is a medical student in Padjadjaran University. She has an interest in stroke. This abstract was her first research which done to get her bachellor in Faculty of medicine Padjadjaran University.

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Notes/Comments: