ABSTRACT

FACTORS THAT INFLUENCE THE DEVELOPMENT OF TYPICAL OR ATYPICAL ANGINA PECTORIS IN CLIENT WITH SIGNIFICANT CORONARY STENOSIS

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Background: Coronary Artery Disease (CAD) was due to imbalance between myocardial supply and demand caused by significant coronary stenosis and can be detected by sign of myocardial ischemia on exercise or pharmacologic stress test (Exercise ECG, Nuclear or MRI myocardial perfusion imaging). The most important symptom of myocardial ischemia was chest pain (Typical or Atypical Angina Pectoris). The purpose of the study was to search factors that influence the development of typical angina or atypical angina. Methods: This study was a retrospective analysis using the medical record and diagnostic coronary angiography (DCA) result in Universitas Airlangga Hospital, Surabaya, Indonesia. Sample size was 159 people, who underwent coronary catheterization between March 2015 and March 2017 at Universitas Airlangga Hospital. Samples were clients with stenosis ≥ 70% and met inclusion and exclusion criterias. A multivariable model of angina pectoris development was generated using stepwise logistic regression. We included risk factors of stenosis coronary. Results and Analysis Risk factors of stenosis coronary included Body Mass Index (BMI) and diabetes mellitus (DM) (all P < 0.05). The accuracy of research model, between BMI and DM influenced the development of typical or atypical angina, was 84.3%. Discussion and Conclusion: BMI had positive correlation with typical angina, may be caused by increase myocardial oxygen demand in obese client compared to lean client at the same level of activity. Inversely in DM had negative correlation with typical angina. Atypical angina in DM clients may be caused by peripheral neuropathy. Further research must identify the present of significant CAD in diabetic client with atypical angina pectoris.

Keywords: stenosis, coronary, risk factor, typical