

Hubungan Antara Kadar Histamin dan Tryptase Plasma dengan Kejadian Infark Miokard Akut ST Elevasi Pada Pasien Dengan Sindroma Koroner Akut

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Abstrak

Latar Belakang: Mekanisme terjadinya Sindroma Koroner Akut (SKA) meliputi thrombosis dan vasokonstriksi pada lesi atherosclerosis. SKA dapat dipicu oleh pelepasan mediator inflamasi yang berasal dari degranulasi sel mast Tryptase dan histamine berperan dalam proses atherogenesis dan proses terjadinya ruptur plak atherosclerosis. SKA secara klinis dapat berupa angina tidak stabil, non- ST *Elevation Myocardial Infarction* dan ST *Elevation Myocardial Infarction*.

Tujuan: Menganalisis hubungan antara kadar histamin dan tryptase dengan kejadian infark miokard akut ST elevasi pada penderita dengan SKA

Metode: Penelitian ini adalah penelitian analitik observasional dengan pendekatan cross sectional. Sampel 40 penderita SKA dikumpulkan secara *purposive samsipling*. Dilakukan pemeriksaan kadar tryptase dan histamine dan diagnosis infark mokard akut berdasarkan definisi universal infark miokard

Hasil: Rerata kadar histamin pada kelompok STEMI berbeda dibanding kelompok NSTEMI-SKA tetapi tidak bermakna (29.05 ± 9.14 vs 28.33 ± 8.19 , $p > 0.05$) ng/ml. Rerata kadar typtase pada kelompok STEMI berbeda dibanding kelompok NSTEMI-SKA tetapi tidak bermakna (14.30 ± 7.12 vs 12.69 ± 9.29 , $p > 0.05$) ng/ml.

Kesimpulan: Terdapat perbedaan kadar histamine dan tryptase pada kelompok STEMI dan kelompok NSTEMI-SKA etapi tidak bermakna.

Kata Kunci: Histamin, tryptase, sindroma koroner akut

The Correlation of Plasma Histamine and Tryptase with ST Elevation Acute Myocardial Infarction in Acute Coronary syndrome Patients

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Abstract

Background: Mechanisms of Acute Coronary Syndrome (ACS) include thrombosis and vasoconstriction in atherosclerosis lesions. ACS can be triggered by the release of inflammatory mediators derived from Tryptase mast cell degranulation and histamine plays a role in the process of atherogenesis and plaque rupture process of atherosclerosis. ACS clinically may include unstable angina, non- ST Elevation Myocardial Infarction and ST Elevation Myocardial Infarction. Heart failure is one of the most frequent complications of SKA

Objectives: Analyze the relationship between histamine and tryptase levels with the incidence of ST Elevation acute myocardial infarction in patients with acute coronary syndrome

Method: This study is observational analytic research with cross sectional approach. Samples of 40 patients with ACS were collected by purposive sampling. Histamine and tryptase levels are examined. Myocardial infarction diagnosis based on universal definition of myocardial infarction

Result: The mean of histamine levels at STEMI group was different than NSTEMI-ACS group but not significant (29.05 ± 9.14 vs 28.33 ± 8.19 , $p > 0.05$) ng/ml. The mean of tryptase levels at STEMI group was different than NSTEMI-ACS group but not significant (14.30 ± 7.12 vs 12.69 ± 9.29 , $p > 0.05$) ng/ml.

Conclusion: There are differences in the levels of histamine and tryptase in the group of STEMI and NSTEMI-ACS group but not significant

Key Word: Histamine, tryptase, acute coronary syndrome