

Peran Kolkisin terhadap Penurunan Kadar Vascular Endothelial Growth Factor pada Pasien Infark Miokard Akut Elevasi Segmen ST dengan Tindakan Intervensi Koroner Perkutan Primer = The Role of Colchicine on Changes in Levels of Vascular Endothelial Growth Factor in Patient with ST-segment Elevation Acute Myocardial Infarction Undergoing Primary Percutaneous Coronary Intervention

Charlie Windri, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=9999920551317&lokasi=lokal>

Abstrak

Penyakit jantung koroner (PJK) atau infark miokard (IMA) adalah salah satu penyebab utama kematian di seluruh dunia. Tindakan reperfusi miokardial merupakan pendekatan utama dalam penanganan PJK. Cedera iskemia-reperfusi (IRI) mewakili cedera tambahan pada otot jantung yang terjadi akibat disfungsi seluler setelah proses reperfusi. Vascular endothelial growth factor (VEGF) merupakan protein yang berperan dalam induksi angiogenesis dan meningkatkan permeabilitas vaskuler. VEGF penting dalam pembentukan pembuluh darah kolateral pasca IMA, namun kadar VEGF yang terlalu tinggi diketahui mengakibatkan restenosis pasca tindakan intervensi koroner perkutan primer (IKPP). Kolkisin dosis rendah diketahui menurunkan kadar VEGF. Penelitian ini bertujuan menilai pengaruh pemberian kolkisin terhadap penurunan kadar VEGF pada serum pasien infark miokard akut-elevasi segmen ST (IMA-EST) sebelum dan pada 48 jam pasca tindakan reperfusi. Penelitian dilakukan menggunakan desain uji klinik tersamar ganda (double blinded randomized clinical trial) yang melibatkan 63 subjek. Pada hasil penelitian didapatkan penurunan kadar VEGF pada 48 jam pasca reperfusi namun tidak didapatkan perbedaan bermakna pada analisis perubahan (delta) kadar VEGF sebelum dan pada 48 jam pasca tindakan reperfusi antara kedua kelompok. Penelitian ini merupakan penelitian pertama yang menilai pengaruh pemberian kolkisin terhadap kadar VEGF pada pasien IMA-EST pasca reperfusi. Penelitian ini dapat dijadikan dasar penelitian lanjutan untuk menilai penurunan kadar VEGF dengan pemberian kolkisin dalam jangka panjang.

.....Coronary heart disease (CHD) or acute myocardial infarction (AMI) is one of the major causes of death throughout the world. Myocardial reperfusion is the main approach in treating CHD. Ischemia-reperfusion injury (IRI) represents additional injury to the heart muscle that occurs due to cellular dysfunction following the reperfusion process. Vascular endothelial growth factor (VEGF) is a protein that plays a role in inducing angiogenesis and increasing vascular permeability. VEGF is important in the formation of collateral blood vessels after MI, but higher levels of VEGF are known to result in restenosis after primary percutaneous coronary intervention (IKPP). Low-dose colchicine is known to reduce VEGF levels. This study aims to assess the effect of colchicine administration on reducing VEGF levels in the serum of patients with acute ST-segment elevation myocardial infarction (IMA-EST) before and 48 hours after reperfusion. The research was conducted using a double-blinded randomized clinical trial design involving 63 subjects. The study result showed the decrease in VEGF levels at 48 hours after reperfusion, but there was no significant difference in the analysis of changes (delta) in VEGF levels before and at 48 hours after reperfusion between the two groups. This study is the first study to assess the effect of colchicine administration on VEGF levels in post-reperfusion IMA-EST patients. This research can be used as a basis for further research to assess the reduction in VEGF levels with long-term administration of colchicine.