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**P533 / #111. E-POSTERS TOPIC: 4. CLINICAL VASCULAR DISEASE / 4.01 COAGULATION AND THROMBOSIS.**

**PROTECTIVE EFFECT OF APELIN, AMLODIPINE AND ANAKINRA IN ISCHEMIA-REPERFUSION INJURY IN MYOCARDIUM**

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**Background and Aims:** The aim of this research is to clarify and compare the protective effects of Apelin, Amlodipine (long-acting dihydropyridine-type (DHP) calcium channel blocker) and Anakinra (Kineret-Interleukin-1 Receptor Antagonist) on ischemia-reperfusion injury in myocardium.

**Methods:** A total number of 50 healthy adult male albino rats were used to study and compare the effect of Apelin-13 (injected intraperitoneally at a dose of 1 µg/kg 15 min before reperfusion began), Amlodipine (administered at a dose of 1 mg/kg body weight daily by oral route for 7 days) and Anakinra (a single intravenous shot of 2mg/kg body weight) on preventing myocardial reperfusion injury in experimental animals.

**Results:** The results of this study showed that in Apelin, Amlodipine and Anakinra treated groups, the mean values of all test parameters were significantly lower than ischemia/reperfusion group (p < 0.001). In Anakinra treated group, the mean values for all parameters were found to be significantly lower when compared with that Apelin and Amlodipine treated groups. In addition, Infraction mass expressed as percentage of the left ventricle weight was found to be non-significantly changed between Anakinra treated group and Ischemic Control group; moreover, on comparing Apelin with Amlodipine treated groups, no significant changes were found.

**Conclusions:** Administration of Apelin, Amlodipine and Anakinra prior to myocardial reperfusion reduces infarct size and markers of infarction in experimental ischemia/reperfusion injury with highest efficacy of Anakinra more than Apelin and Amlodipine.

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**P535 / #408. E-POSTERS TOPIC: 4. CLINICAL VASCULAR DISEASE / 4.01 COAGULATION AND THROMBOSIS.**

**DEVELOPMENT FEATURES OF CORONAVIRUS DISEASE COMPLICATIONS IN PATIENTS WITH CORONARY HEART DISEASE**

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**Background and Aims:** To study the incidence and clinical features of myocardial infarction development in patients with coronary heart disease (CHD) after suffering coronavirus disease.

**Methods:** We studied clinical condition of 64 patients admitted with chest pain complaints to the emergency room of the multidisciplinary clinic of the Tashkent Medical Academy. The average age was 52.5±2.4 years. All patients were divided into two groups. The first group had coronary heart disease with anemia and the second group was made up of patients with CHD without anemia.

**Results:** Only 41 patients (64%) had acute myocardial infarction (MI) with various localization. The group included 10 women and 31 men. The pain verbal scale showed a low level of pain syndrome, as well as atypical location of pain in the heart. In 13 patients, was detected a high level of IgG of coronavirus infection, whereas IgM level was high in 28 patients. The level of fibrinogen in the blood plasma averaged 355 g/l, the blood sugar level was around 7.3 mmol/l on an empty stomach, hematocrit level increased to approximately 0.49 l/l. In men, was noted the decrease of blood hemoglobin to 101.6 g/l. The rest of the indicators were practically not deviated from the norm. The ECG shows typical elevations of the ST segment from the isoline.

**Conclusions:** Atypical clinical development signs of MI in patients with CHD is associated with a previous coronavirus infection, a large amount of lung tissue damage, a low awareness of patients about possible complications of CHD and low adherence to maintenance drug therapy after suffering Covid-19.