

Summary of the M.S thesis No., **12394**. . **Clinical biochemistry**, Faculty of Veterinary Medicine, Urmia University.

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**Title:** Evaluation of Copeptin and Chemerin levels in sera of the patients with coronary heart disease

**Abstract:**

The most common heart disease is coronary artery disease, which is one of the most important causes of death in the world in recent decades; Therefore, early identification and accurate diagnosis are necessary for adequate intervention and diagnostic treatment of the relevant patients. This study was conducted with the aim of investigating the levels of copeptin and chemerin in patients with coronary artery occlusion. In this study, 70 people were examined and underwent angiography by an international specialist doctor after filing a case. Based on the results of angiography, these patients were divided into control groups (without coronary artery occlusion), or one blocked coronary vessel, or two blocked coronary vessels, or three blocked coronary vessels. Patient information including gender, age, history of heart disease, underlying diseases such as diabetes mellitus, being a smoker, and family history of high blood lipids were recorded. Then, using blood serum samples of patients, biochemical parameters including triglyceride, cholesterol, LDL, HDL and other parameters of copeptin and chemerin were measured using specific human ELISA kits. The findings of this research showed that the prevalence of coronary artery occlusion in men (54.3%) was higher than in women (45.7%). In addition, the highest frequency of patients with coronary heart disease was related to the age group of 51-60 years (30%). It was also observed that the frequency of patients with minimal coronary artery occlusion with occlusion of one heart vessel (Minimal CAD 1VD) had the highest frequency (27.1%) among other heart diseases in the study population. Examining the levels of copeptin and chemerin in patients with coronary artery occlusion compared to the control group showed that the values of these indicators increased significantly in patients with CAD compared to the control group, and the highest increase occurred in patients with occlusion of 3 vessels. they showed According to the findings of this research, the levels of copeptin and chemerin in patients with coronary artery disease increase with the severity of the disease and justify the role of these biomarkers in the diagnosis and prognosis of coronary heart disease..

**Key words:** Camrin, copeptin, coronary heart disease