

Summary

The current study aimed to know and evaluate the role of TNF- α and the role of (Interleukin-17) in the development of cardiovascular diseases (CVD), as well as verification of rs2275913 SNP of IL-17A gene in cardiovascular diseases. The study included 100 samples that were divided into 50 patients with cardiovascular diseases attending the heart center in Dhi Qar Governorate those lying in the Coronary Care Unit (CCU) Inside the center and those lying in its halls, and 50 healthy individuals who did not suffer from cardiovascular disease as a control group, blood samples. The patient's group and the healthy group used to use medical syringes disposable at a rate of 5 ml from each person, this was done during the period extending from 12/1/2022 to 4/1/2023, for both sexes and different ages. A questionnaire form was filled out to collect the necessary information from both groups of patients and healthy people, and the samples were stored in laboratory tubes appropriate for each examination. Where a complete blood count (CBC) and Enzyme-linked immunosorbent assay (ELISA), PCR test, and competency phagocytosis Activity.

The results of the current study showed that the largest percentage of patients was in the oldest age group in the study (≥ 60) the percentage was (60%), while the lowest percentage was in the youngest age group in the study (30-39) where the percentage was (6%).

The study results showed that women are more susceptible to infection than men, as the percentages were (52%, and 48%), respectively. The percentage of smokers among patients was higher when compared to the percentage of smokers in the healthy group, where the percentages

compared were (40%, and 20%), respectively. With a significant difference ($P \leq 0.05$),

The current study showed that the percentage of patients who live in the city is higher than the percentage of patients who live in the countryside (70%, and 30%), respectively, and that the percentage of patients who have a family history of the disease is lower than the percentage of patients who do not have a family history (24%, 76%). %) respectively. As for the percentage of patients who were overweight, their percentage was (38%), and those who had first-degree obesity were (20%), while those who had a normal weight were (42%). In contrast, the percentage of patients suffering from Hypertension was higher than the percentage. Patients who did not have high blood pressure (60%, 40%), respectively, and the percentage of patients with type 2 diabetes was lower than those who did not (36%, 64%), respectively. The percentage of phagocytosis activity in patients is lower when compared to healthy people, where the percentages were ($36.44 \pm 41.00, 38.56 \pm 29.70$) respectively. The results of blood parameters showed that there were no significant differences between the total number of white blood cells and the total number of red blood cells, as well as the percentage of hemoglobin, and the values of the results were close to the comparison with the healthy group, and a decrease in the percentage of lymphocytes and an increase in the percentage of neutrophils compared to the healthy group. The results of the current study showed similar results for the level of TNF- α in the serum of patients and healthy people, as the results were ($8.120 \pm 4.16, 8.118 \pm 3.72$), respectively.