



## **Relationship of Gamma-Glutamyltransferase Activity, Glutathione And Some Electrolytes In Serum Heart Failure Patients**

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### **ABSTRACT**

*Gamma-glutamyltransferase (GGT) has been found to be involved in the pathogenesis of cardiovascular diseases, especially coronary artery disease, and the prognosis of cardiovascular disease may be predicted by increasing GGT levels. GGT levels are related to cardiovascular emergencies of chronic heart failure. Gamma-glutamyltransferase(GGT), an important enzyme in glutathione (GSH) metabolism. So studies are made on the relationship between Gamma-glutamyltransferase (GGT) activity, serum reduced Glutathione and some electrolytes such as Na, K, and Cl, in patients with heart failure. We selected 80 patients with heart failure who attended for treatment in Baghdad Medical City, the patients characterized in Electromyo Cardio Gram (ECG) by medical in hospital ,the patient samples were divided into the following(40) females ,(40) males with age ranges from(30-87) year, and(80) normal healthy controls, (40) males ,(40) females with age ranges from 27-79 year.*

**Keywords:** Gamma-glutamyltransferase (GGT), Glutathione (GSH), Coronary Artery Disease (CAD), Systolic Blood Pressure(SBP) and Diastolic Blood Pressure (DBP).

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