

Abstract:

Coenzyme Q10 is a potent antioxidant that is soluble in fat. L-arginine is an amino acid that has metabolic effects. In this study, 48 rats were purchased to evaluate the anti-diabetic effects of Coenzyme q10 and L-Arginine and They were divided into 6 groups. the first group was healthy, the second group received diabetic control (diabetic without treatment) that were diabetic with 120 mg/kg aloxone, The third group of diabetic rats with 50 mg/kg of l-arginine, the fourth group of diabetic rats with 10 mg/kg q10, the fifth group of diabetic rats with l-arginine and q10 combined, the sixth group of diabetic rats receiving metformin at a dose of 250 mg/kg daily orally. After 4 weeks blood sampling was done And Measured parameters of glucose, insulin, liver enzymes, serum urea and creatinine, and hemoglobin a1c. There was a significant difference between glucose diabetic groups treated with untreated diabetic group($P < 0.05$). There was no significant difference in BUN and creatinine between groups. There was a significant difference between the hepatic enzymes of diabetic groups treated with non diabetic group and there was a significant difference between the control group and the diabetic control group($P < 0.05$). There was a significant difference in the hemoglobin a1c between the groups treated with non-diabetic group and the diabetic group treated with Q10 coenzyme had a significant difference with the control group ($P < 0.05$). There was no significant difference between the groups in insulin measurement($P < 0.05$).

Keywords: L-Arginine, co Q10, Glucose, Diabetes, Rat



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Antidiabetic effect of administration Q10 and L-arginine in diabetic rats

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