

Aim: Prophylactic antidiabetic effect of Amlaras and Lycopene alone and in combination in rats

Methods: In the present study, male Wistar albino rats of weighing 150-250 gm were procured from authorized suppliers. Rats were anesthetized light by giving di-ethyl ether. Blood is withdrawn from retro-orbital plexus and cold centrifuged for blood serum. The drugs Amlaras (500 mg/kg; p.o.) and Lycopene (4 mg/kg; p.o.) were administered for 14-days and on 14th day blood serum was collected and estimated for following parameters like SOD, GSH, LPO and Glucose. On 15th day, diabetes was injected by means of Alloxan (110 mg/kg; i.p.) and STZ (45 mg/kg; i.p.). The blood serum was collected and estimated on 1, 3rd and 7th day of diabetes.

Results: There was significant increase in the antioxidant levels like GSH, SOD and NO and decrease in LPO in blood serum glucose level compared to their respective control group and also shown significant synergistic effect in combination.

Conclusion: These findings suggest that Amlaras and Lycopene may have prophylactic effect in diabetes and also have synergistic effect in combination in both Alloxan and STZ induced diabetic rats.

Keywords: Prophylaxis, Amlaras, Lycopene and Oxidative stress.