

Iraqi Propolis as antioxidant and protective therapy for kidney failure treatment of diabetic rats

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Abstract : Abstract :Seventy five rats were divided into five groups (n=15),namely control group, group stimulating diabetes after 3 weeks of the beginning of the experiment, a group of natural drenched ethanolic extract of local propolis (EEP) daily for 6 weeks, a group drenched (EEP) for 3 weeks then is stimulated diabetes for 3 more weeks, and the fifth group is stimulated diabetes after 3 weeks of the beginning of the experiment and then drenched (EEP) for 3 weeks after stimulation.

At the end of the experiment, collected samples of blood serum were used to evaluate the oxidative status by assessment the Superoxide Dismutase(SOD), Catalase(CAT), Glutathione-s-Transferase (GST), Malondialdehyde(MDA), Nitric Oxide (NO), as well as the extent of the injury was appointed renal failure of cells to measure the level of uric acid(UA) and serum total protein(STP). Observed results were shown a significant decrease in body weight, effectiveness of the antioxidant system, and protein level in the serum, a significant increase in the level of glucose in the blood, an increase in the concentration of malondialdehyde, Nitric Oxide, and Uric acid in the serum for the diabetic group . On the other hand, the EEP has had a significant effect in reducing the level of glucose, MDA, NO, Uric acid and the occurrence of a significant increase in the effectiveness of the system antioxidant and the concentration of total serum protein(P <0.05), and improve the structure of the tissue of the kidney.

It can be concluded that the extract has antioxidant effectiveness and reduce the level of sugar in the blood and thus protect the overall impact of its complications such as kidney failure.

Keywords: Iraqi Propolis, antioxidant, protective therapy, kidney failure, diabetic rats.

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