

A comparative hepatoprotective effect of Liraglutide and nano extracts of *Ficus Carica* and *Olea Europaea* leaves on diabetes-induced in laboratory animals

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Abstract

The comparative effect of liraglutide and nano extracts of *ficus carica* and *Olea europaea* leaves on the histopathological and blood biomarkers of the liver of male albino Wistar rats was investigated in type 2 diabetes mellitus adult male rats' model. Forty (40) male albino Wistar rats of an average body weight of 247.60 ± 6.58 g were used for this study. Thirty rats from a total of 30 rats used for this study were injected with a single dose of 60 mg/kg/ b.w of STZ to induced a diabetic rat's model and assigned into (2,3&4) test diabetic groups (10) rats in each group. The rest (10) rats served as the negative control Group (1). Rats in Group (2) were served as the positive control, rats in Groups (3) were injected subcutaneous with liraglutide at doses of (0.2 mg/kg/ b.w /day), and rats in Group (4) received orally 0.45gm/250g b.w./day of nano-extract of leaves. After 8 weeks of treatment, rats from each group were sacrificed and blood was collected for enzyme ALP, ALT and AST assay. These hepatocytes lesions were significantly reduced with liraglutide and nano extracts of NEML administration in test groups 3&4. Treatment with the liraglutide and nano extract of NEML leaves restored the altered parameters in serum enzymes towards normal, and nano extract of NEML leaves possess good anti-inflammation and antioxidant, potentials than liraglutide that exhibited hepatoprotective properties against diabetic-induced hepatocellular damage in rats.

Biography:

My name is Safa Qahl, I am 32 years old, I am lecturer. I have completed master degree in biology in 2015 with GPA 4.98 out of 5 from KAU and currently preparing my PhD in cytology and histology, I have completed most of the PhD requirements with GPA 5 out of 5, I participated in Geneva invention exhibition in 2016 in a poster entitled "The effect of olive oil and fig on the liver", Where I discovered a medical formula which resulted in it being patented and won the bronze medal, I am very interested in research, innovations and inventions.

Speaker Publications:

1. "Trends in Adolescent Hip Arthroscopy From the PHIS Database 2008-2018".
2. "Correlation between Subfoveal Choroidal Thickness and Anterior Segment Inflammation in Patients with Chronic Stage of Vogt-Koyanagi-Harada Disease".
3. "Transcriptional Analyses Identify Genes That Modulate Bovine Macrophage Response to Infection and Immune Stimulation".
4. "Right Scapular Swelling Revealed to Be a Spontaneous Lateral Chest Wall Hematoma: An Intriguing Case Report".
5. "Avian Viruses that Impact Table Egg Production".

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