The Role of FoxO3a in Lipopolysaccharide/D-galactosamine Induced Hepatotoxicity in Rats

A Thesis Presented by

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Under the title of

The Role of Certain Factor in Treatment of Acute Hepatic Failure Induced by D-GalN/LPS Mediated by its Antioxidant Effects.

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ABSTRACT

Acute Hepatic Failure is the most serious liver disease worldwide and caused by D-GalN/LPS administration. The aim of this study is to assess the antioxidant effects of certain factor in rat liver treated with D-GalN/LPS. Thirty male Wistar rats were randomized into three groups of 10 animals. Normal control treated with saline, D-GalN/LPS group treated with (D-GalN (300 mg/kg) + LPS (10 μg/kg), treatment group treated with a certain factor (100 mg/kg) + (D-GalN (300 mg/kg) + LPS (10 μg/kg)). We showed that D-GalN/LPS significantly increase the lipid peroxidation and ALT liver enzyme activity, whereas significantly decrease the antioxidant (GSH and CAT). We also observed a statistically significant decrease in MDA and ALT level with the certain factor treated animals, also it restores the depletion in GSH and CAT. In conclusion, this factor act as a powerful hepatoprotectant

KEYWORDS:

D-GalN/LPS; Antioxidant; AHF; Oxidative stress.

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Dedication,

TO MY FATHER, MOTHER, Husband AND MY SON YOUSSEF