شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم

HANAA ALY

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جامعة عين شمس

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قسم

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

HANAA ALY

The possible protective effect of Resveratrol on Naphthalene induced nephrotoxicity in Adult Male Albino Rat

A Thesis

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Mohammed Nabil Mohammed Biomy Eltanany

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List of Abbreviations

Abb.	Full term
AKI	Acute Kidney Injury
AP-1	Activator proteins -1
CKD	Chronic Kidney Disease
DCT	Distal convoluted tubule
DNA	Deoxyribonucleic acid
ESRD	End stage renal disease
FOXO	Forkhead Box 0
GBM	Glomerular Basement Membrane
GSH	Glutathione
GPx	Glutathione Peroxidase
H & E	Hematoxylin and Eosin
I.M	Inner Medulla
O.M	Outer Medulla
PCT	Proximal convoluted tubule
NA	Naphthalene
NAD	Nicotinamide adenine dinucleotide.
Nrf2	Nuclear Factor 2
PAS	Periodic Acid-Schiff
RNS	Reactive nitrogen species
ROS	Reactive oxygen species
SIRTI 1	Sirtuin 1

INTRODUCTION

The kidney is an essential organ required by the body to perform diverse important functions including the maintenance of homeostasis, regulation of the extracellular environment, such as detoxification, and excretion of toxic metabolites and drugs Hence, the kidney is considered as a target organ for exogenous toxicants. ***(Uetani and Bouchard, 2009)***

Nephrotoxicity is a kidney-specific feature in which excretion does not go smoothly accredited to toxic chemicals or drugs. Approximately 20% of nephrotoxicity is induced by drugs, but medication of the elderly increases the incidence of nephrotoxicity up to 66% as the average life span increases. Incidental toxic ingestion, chemotherapy and anticancer medicine carry major roles regarding drugs-induced kidney injury. ***(Chawla and Kimmel, 2012)***

Naphthalene is a bicyclic aromatic compound that has wide industrial and commercial applications. It is used as the starting material for the synthesis of other compounds, such as moth repellent, soil fumigants and lavatory deodorants. Most exposure occurs through a low dose of chronic inhalation, dermal contact, or ingestion throughout the food chain. Biochemical markers of toxicity can be demonstrated in various tissues, such as the kidney, brain, eye, lungs and liver. Diverse biomarkers of toxic