

بسم الله الرحمن الرحيم

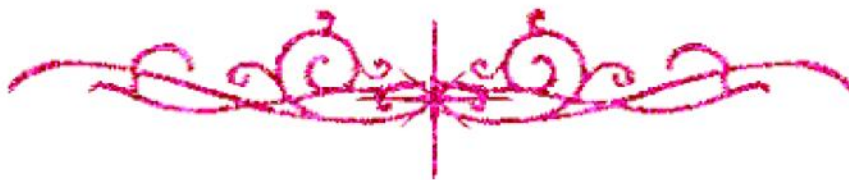


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شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
على هذه الأقراص المدمجة قد أعدت دون أية تغيرات



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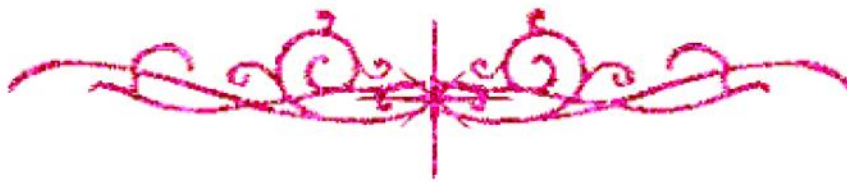
تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



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بعض الوثائق الأصلية تالفة



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بالرسالة صفحات

لم ترد بالأصل



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Effect of Adjuvant N- acetyl Cysteine to Clomiphene Citrate on vascular endothelial growth factor in polycystic ovary syndrome

B 10185

Thesis

Submitted for Partial Fulfillment of
M.Sc. Degree in Clinical & chemical Pathology

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To my family

To my husband

To my lovely

Daughter

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿وَعَلَّمَكَ مَا لَمْ تَكُنْ تَعْلَمُ وَكَانَ فَضْلُ
اللَّهِ عَلَيْكَ عَظِيمًا﴾

صَدَقَ اللَّهُ الْعَظِيمُ

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List of Abbreviations

17- OHP	17 – hydroxyprogesterone.
AIDS	Acquired immunodeficiency syndrome.
a. m	Ante- meridiem.
C°	Celcius.
Cm	Centimeter.
Cm ³	Cubic millimeter
CC	Clomiphene Citrate.
CD	Cluster of differentiation
cDNA	Coding Deoxyribonucleic acid.
CL	Corpus luteum.
dl	Decililitre.
DHEAS	Dehydroepiandrosterone sulfate.
DNA	Deoxyribonucleic acid.
Kd	Dissociation constant.
EG- VEGF	Endocrine gland- derived vascular endothelial Growth factor.
ELISA	Enzyme linked immuno sorbant assay.
E ₂	Estradiol.
E ₁	Estrone
ECM	Extracellular matrix.
FIK-1	Fetal liver kinase -1
Flt- 1	Fms- like tyrosine kinase.
FSH	Follicle stimulating hormone.
FDA	Food Drug Administration.
Gn Rh	Gonadotropin releasing Hormone.
HCG	Human chorionic gonadotrophin.

HIV	Human immune deficiency virus.
HMG	Human menopausal gonadotropin
HUVEC	Human umbilical vein endothelial cells.
Ig	Immunoglobulin.
IVF	In vitro fertilization
IU	International unit.
IM	Intramuscular
Kg	Kilogram.
KDR	Kinase domain region.
L	Litre.
LH	Lutenizing hormone
LHRF	Lutenizing hormone releasing factor.
mRNA	Messenger- ribonucleic acid.
μ l	Micro Litre.
μ g	Microgram.
ml	Milli Litre
mg	Milligram.
mm	Millimeter.
mmol	Millimol
MAPK	Mitogen- activated protein kinase.
NAC	N- acetylcysteine.
ng	Nanogram.
nm	Nanometer.
nmol	Nanomol
NIH	National Institute of Heath.
OHSS	Ovarian hyperstimulation syndrome.
%	Percent
PI3 – Kinase	Phosphatidylinositol 3- Kinase.

pM	Pico mole.
Pg	Picogram.
PlGF	Placental growth factor.
PA	Plasminogen activators
PAI-1	Plasminogen activator inhibitor I-1
PCOS	Polycystic ovary syndrome.
p.m	Post meridiem.
rhv MAb VEGF	Recombinant humanized monoclonal antibody against vascular endothelial growth factor.
GSH	Reduced glutathione.
RNA	Ribonucleic acid.
SC	Subcutaneous.
SD	Standard deviation.
SE	Standard error
sFlt-1	Soluble form of Flt-1.
tPA	Tissue plasminogen activator.
T K	Tyrosine kinase.
uPA	Urinary plasminogen activator.
VEGF	Vascular endothelial growth factor.
VEGF- A	Vascular endothelial growth factor- A.
VEGF – B	Vascular endothelial growth factor- B.
VEGF- C	Vascular endothelial growth factor- C.
VEGF- D	Vascular endothelial growth factor- D.
VPF	Vascular permeability factor.
WHO	World Health Organization.
Xg	Gravity
Yrs	Years



Introduction

Women with polycystic ovary syndrome have chronic anovulation and androgen excess. This condition occurs in 5-10% of women. Important characteristics are insulin resistance, hyperandrogenism, and altered gonadotropin dynamics (*Guzick, 2004*).

Women with polycystic ovarian syndrome typically present because of irregular bleeding, hirsutism, infertility, obesity, baldness, acne and cardiovascular diseases (*Rajkhowa et al., 2000*).

Vascular endothelial growth factor, which is an endothelial cell mitogen, had been considered as an important mediator of the syndrome.

It is possible that the hypersecretion of vascular endothelial growth factor in women with polycystic ovary syndrome is due to an increase in the number of vascular endothelial growth factor secreting cells or that the cells individually hypersecrete vascular endothelial growth factor. Increased vascular endothelial growth factor may be responsible for the fluid shift from the vascular bed to the extravascular space, which characterizes polycystic ovary syndrome (*Agrawal, 2000*).

N- acetylcysteine (NAC) is the acetylated precursor of both the amino acid L- cysteine and reduced glutathione (GSH). It is used as a mucolytic agent in chronic respiratory illness, antidote for hepatotoxicity due to acetaminophen overdose, powerful antioxidant and a potential therapeutic agent in the treatment of cancer, heart diseases, HIV infection, heavy metal toxicity, and other diseases characterized by free radical oxidant damage (*Borgstrom et al., 1986*).