



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية
@ ASUNET



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of
15-25- c and relative humidity 20-40%

بعض الوثائق الأصلية تالفة

بالرسالة صفحات لم ترد بالاصل



Faculty of Pharmacy

6/5.19.10



BIOCHEMICAL CHANGES INDUCED

B / SILDENAFIL (VIAGRA) IN DIBETIC RATS

THESIS

*Submitted For Master Degree In Pharmaceutical
Sciences (Biochemistry)*

Prepared By :

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2008

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JAP



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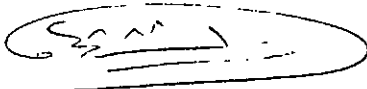
Faculty Of Pharmacy Minia University
2008

Approval Sheet

The Biochemical Changes Induced By Sildenafil (Viagra) In Diabetic Rats

Approved by:-

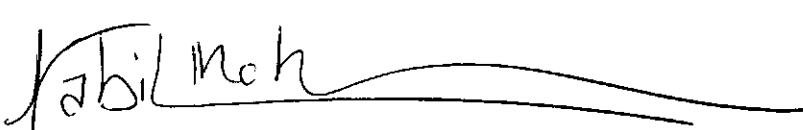
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Dated : January/2008 .

Dedication

I dedicate this work with my deep thanks, love and application to my mother, my father, my husband, my brother and my lovely precious son Michael for their continuous prayers and support.

Abeer Adel Awad

Acknowledgement

All praise is due to God for granting me the power and patience, relieving me during hard time, and helping me through my whole life.

I would like to express my sincere gratitude, appreciation and great indebtedness to Prof. Laila Mahmoud Mahmoud Hassan Faddah, Professor of Biochemistry, Faculty of Pharmacy, Minia University for her sincere help and encouragement throughout this study.

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Abeer Adel Awad

List of Abbreviations

DA	: Dopamine
ED	: Erectile dysfunction
EDTA	: Ethylenediamine tetra acetic acid
FRs	: Free radicals
GMP	: Guanosine monophosphate
GSH	: Reduced Glutathione
LPO	: Lipid peroxides
MED	: Male erectile dysfunction
NEP	: Norepinephrine
NO	: Nitric oxide
OPT	: Ortho phthaldialdehyde
PDE-5	: Phosphodiesterase – 5
ROS	: Reactive oxygen species
SC	: Sildenafil citrate
Ser	: Serotonin
SGC	: Soluble guanylyl cyclase
TCA	: Trichloroacetic acid
Vit. E	: Vitamin E

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Aim of the work

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The purpose of this study is to investigate the effect of sildenafil citrate on :

- 1- Neurotransmitters as NEP, Ser, DA, NO.
- 2- Some elements as sodium, potassium and calcium.
- 3- Oxidative stress, assessed by lipid peroxide liver contents in diabetic rats.
- 4- The effect of vit. E. when used alone or with sildenafil citrate on the previous parameters.

This experimental trial will be conducted to outline the role of neurotransmitters in SC actions to spot light on the possible cardio vascular risk factors, in addition to assess the effect of the drug on the oxidative stress status in the liver of animals after induction of diabetes. The role of free radical scavenger (vit. E.) will be also tried to help in finding possible adjuvant additive to SC in the future for achieving a safe use for diabetics.