

بسم الله الرحمن الرحيم



-Cardon - Cardon - Ca





شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم قسم

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



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار







بعض الوثائق

الأصلية تالفة







بالرسالة صفحات

لم ترد بالأصل





MORPHOMETRIC AND ULTRASTRUCTURAL CHANGES OF TESTIS IN DIABETIC RATS

THESIS

Submitted for partial fulfillment of M.D. Degree in Basic Medical Science (Anatomy)

By

OMYMA IBRAHEEM ZEEDAN

M.B.,B.Ch., M.Sc. Anatomy

UNDER THE SUPERVISION OF

Prof. Dr.
Bothina Labib Mahmoud

Professor & Head of Histology
Department,
Faculty of Medicine,
Menoufiya University

Prof.Dr. Fouad Kamal Mansour

Professor & Head of Anatomy
Department,
Faculty of Medicine,
Menoufiya University

Prof. Dr. Abdel Moneim Ali El-Barbary

Professor of Anatomy, Faculty of Medicine, Menoufiya University Dr.
Nariman Abdel Rahman Abdel Fattah

Lecturer of Anatomy, Faculty Medicine, Menoufiya University

عسرلنغ ببرري

Faculty of Medicine

Menoufiya University

2002

·

MORPHOMETRIC AND ULTRASTRUCTURAL **CHANGES OF TESTIS** IN DIABETIC RATS THESIS

Submitted for Partial fulfillment of M.D. Degree in Basic Medical Science (Anatomy)

BY

OMYMA IBRAHEEM ZEEDAN

M.B., B.Ch., M.Sc. Anatomy

Discussed by

Prof. Dr.

Fouad Kamal Mansour

Professor & Head of Anatomy

Department,

Faculty of Medicine,

Menoufiya University

Prof. Dr.

Kamal Asaad Mohamed

Professor of Anatomy Faculty of Medicine,

Ain Shams University

Prof. Dr.

Bothina Labib Mahmoud

Professor & Head of Anatomy

Department,

Faculty of Medicine,

Menoufiya University

Prof. Dr.

Azza Ali Saber

Professor of Anatomy Faculty of Medicine,

Menoufiya University

Supervised by

Prof. Dr.

Fouad Kamal Mansour

Professor & Head of Anatomy

Department,

Faculty of Medicine,

Menoufiya University

Prof. Dr.

Bothina Labib Mahmoud

Professor & Head of Anatomy

Department,

Faculty of Medicine.

Menoufiya University

Prof. Dr.

Abdel Moneim Ali El-Barbary

Professor of Anatomy

Faculty of Medicine,

Menoufiya University

Dr.

Nariman Abdel Rahman Abdel Fattah

Lecturer of Anatomy

Faculty of Medicine,

Menoufiya University

Faculty Of Medicine Menoufiya University 2002

<u>.</u>

F.

Barrier Commence

 \mathfrak{F}_{i}

42

(°.

7

811

3.

E.F.

1

7

. .3.

CONTENTS

SUBJECT:	PAGE
INTRODUCTION AND AIM OF THE W	ORK1
REVIEW OF LITERATURE:	
♦ Anatomical and histological aspects of t	he testis3
♦ Regulation of spermatogenesis	11
♦ Pharmacological aspects of alloxan	13
♦ Relevant work on diabetes	14
MATERIALS AND METHODS	19
RESULTS	
♦ Histological results	
♦ Morphometric results	77
♦ Ultrastructural results	92
DISCUSSION	118
SUMMARY AND CONCLUSION	128
REFERENCES	132
@ ARARIC SUMMARY	1

one.

of

for

and

ino.

îo a

...sor

iya iya

box of the Breek

bdi. Some market

ANT CONTRACTOR OF THE SECOND

nemia . D

. Factor of sedicine,

and the second

ACKNOWLEDGEMENT

First and foremost, thanks are due to ALLAH.

It is a great honor for me to express my deepest gratitude and sincere appreciation to Prof. Dr. Bothina L. Mahmoud, Professor and Head of Histology Department, Faculty of Medicine, Menoufiya University, for expert guidance, continuous keen supervision, valuable advice and generous encouragement and support offered to me throughout this work. Without her great effort, time given and scientific experience, this work wouldn't come out.

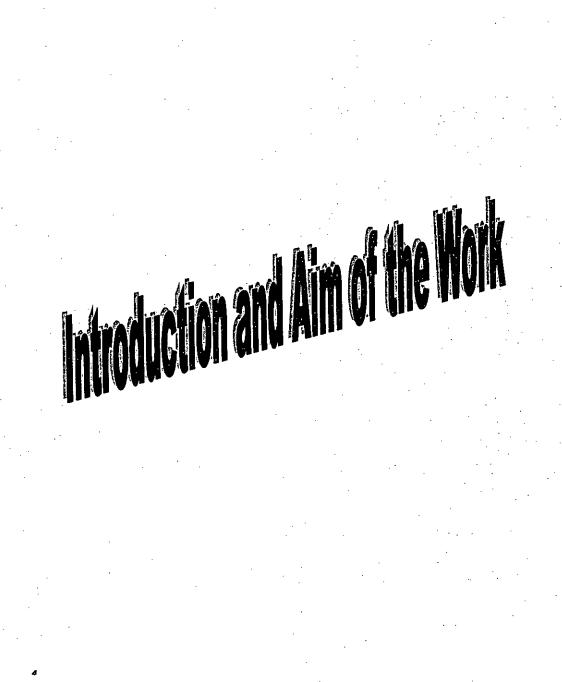
I would like to express my deep thanks and sincere feelings of gratitude to my teacher and Professor Dr. Fouad Kamal Mansour, Professor and head of Anatomy Department, Faculty of Medicine Menoufiya University, for expert guidance, excellent cooperation, unlimited help and continuous, encouragement through out this work.

My greatful thanks and sincere gratitude are expressed to Dr. Abd El-Monem El-Barbary, Professor of Anatomy, Faculty of Medicine, Menoufiya University, for his outmost help and continuous encouragement.

I wish to express my deep thanks and appreciation to Dr. Nariman Abdel Rahman Abdel Fattah, Lecturer of Anatomy, Faculty of Medicine, Menoufiya University for valuable efforts, continuous help and guidance.

Thanks are extended to every one helped me in this work.

j, $m{arphi}$



Simple transfer !

۲,

Ċ

•

824

ξ 4

Ω,

Э

r. ·

ф.,

ď,

y...

3:

j:.

14

Ç.,

Ç.

. วาย 1. อีสา สาสอยที่

. .