



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

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



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %



شبكة المعلومات الجامعية



بعض الوثائق الأصلية تالفة



شبكة المعلومات الجامعية



بالرسالة صفحات
لم ترد بالأصل

**SOME HISTOCHEMICAL AND
ULTRASTRUCTURAL STUDIES ON THE
EFFECT OF TOBRAMYCIN (NEBCIN) ON THE
PROXIMAL AND DISTAL CONVOLUTED
TUBULES IN THE KIDNEY OF ALBINO RAT**

Thesis

**SUBMITTED IN PARTIAL FULFILLMENT FOR M. D. DEGREE
IN
BASIC MEDICAL SCIENCES (HISTOLOGY)**

By

AMAL AHMED ALI EL-SHEIKH

(M.B., B. Ch.)

(M.SC. HISTOLOGY)

Assistant Lecturer of Histology

SUPERVISORS

Prof. Dr.

ABD EL-MONEIM F. ZAMZAM

Prof. of Histology and Former Dean of
Faculty of Medicine
Tanta University

Prof. Dr.

NADIA FOUAD EL-SAYED HASSAN

Prof. and Head of Histology Department
Faculty of Medicine
Tanta University

Dr.

THORAYA ABD EL-AZIZ EL-DEEB

Ass. Prof. of Histology
Faculty of Medicine
Tanta University

Dr.

EZZAT ABD EL-AZIZ EL-DERINI

Lecturer of Histology
Faculty of Medicine
Tanta University

FACULTY OF MEDICINE

TANTA UNIVERSITY

1998

B9525

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿سُبْحَانَكَ لَا إِلَهَ إِلَّا مَا عَلَّمْتَنَا
إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ﴾

صدق الله العظيم

ACKNOWLEDGMENT

First, I wish to express my deepest gratitude and thanks to ALLAH, whose magnificent help was the main factor in accomplishing this work.

My great appreciation and cordial thanks to Prof. Dr. Abd El-Moneim Farid Zamzam, Professor of Histology and Former Dean of Faculty of Medicine, for his close kind supervision, for giving much of his precious experience and time, for his encouragement throughout this work and for his effort in photography.

I would like to express my deepest gratitude to Prof. Dr. Nadia Fouad Hassan, Professor of Histology and Head of Histology Department, for her intimate supervision, valuable instructions and unlimited help in every step of this work.

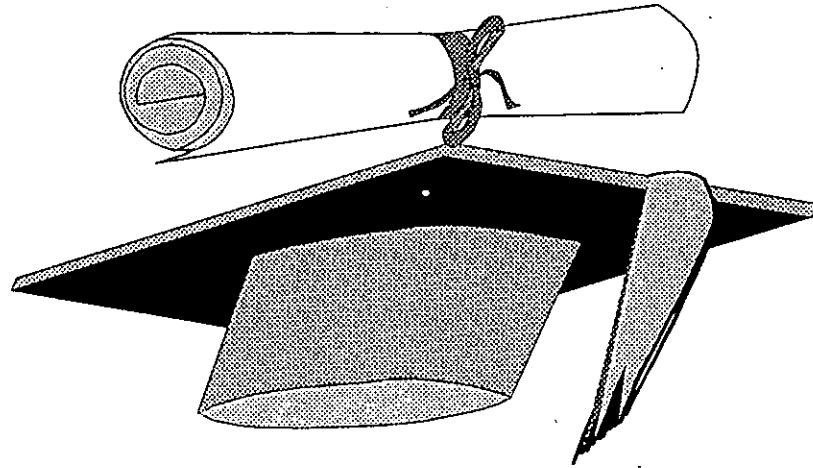
I owe special gratitude to Dr. Thoraya El-Deeb, Ass. Professor of Histology, for her excellent cooperation, helpful instructions and continuous guidance.

Also, I am greatly grateful to Dr. Ezzat El-Derini, Lecturer of Histology, for his generous help and encouragement during the execution of this work.

I would like to express my particular appreciation to all members of staff and colleagues in the Department of Histology, Faculty of Medicine, University of Tanta, for their continuous encouragement and help.

CONTENTS

	Page
INTRODUCTION	1
AIM OF THE WORK	3
REVIEW OF LITERATURE	4
<i>Some histological aspects of the kidney</i>	4
<i>Histophysiology of the kidney</i>	27
<i>Some histochemical aspects of the kidney</i>	30
<i>Pharmacological aspects of tobramycin</i>	35
<i>Previous work on aminoglycoside toxicity</i>	39
MATERIALS AND METHODS	43
RESULTS	53
DISCUSSION	133
SUMMARY AND CONCLUSION	157
REFERENCES	163
ARABIC SUMMARY	



INTRODUCTION

INTRODUCTION

