Histological and Immunohistochemical Study of the Effect of Orlistat on Colonic Mucosa of Albino Rats

Thesis
Submitted for partial fulfillment of
Master Degree in Histology
By

Mohammad Abdul-Monaem Abdul-Hamid Affan

M.B.B.CH Faculty of Medicine, Ain Shams University

Supervised by

Prof. Dr. Samir Nairooz Ibrahim

Professor of Histology Faculty of Medicine, Ain Shams University.

Prof. Dr. Suzi Hanafi Ibrahim

Professor of Histology Faculty of Medicine, Ain Shams University

Dr. Sahar M. Mahdy Omar

Lecturer of Histology Faculty of Medicine, Ain Shams University

> Faculty of Medicine Ain Shams University 2010

دراسة هستولوجية وهستوكيميائية مناعية لتأثير عقار الأورليستات على الغشاء المخاطي لقولون الجرذان البيضاء

بحث مقدم توطئة للحصول على درجة الماجستير في الهستولوجيا

مقدم من

الطبيب/ محمد عبد المنعم عبد الحميد عفان بكالوريوس الطب والجراحة - جامعة عين شمس

إشراف

أ.د/ سمير نيروز إبراهيم أستاذ الهستولوجيا - كلية الطب - جامعة عين شمس

أ.د/ سوزي حنفي إبراهيم أستاذ الهستولوجيا - كلية الطب - جامعة عين شمس

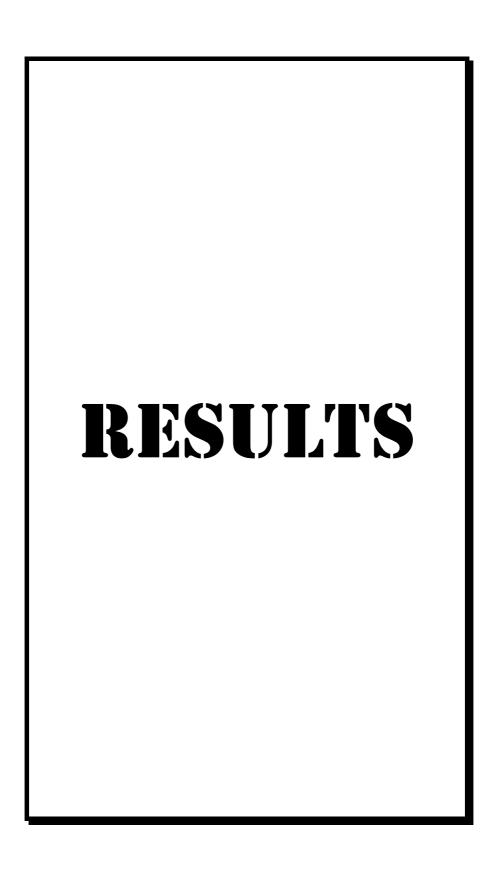
د/سحر محمد مهدي عمر مدرس الهستولوجيا - كلية الطب - جامعة عين شمس

كلية الطب - جامعة عين شمس 2010

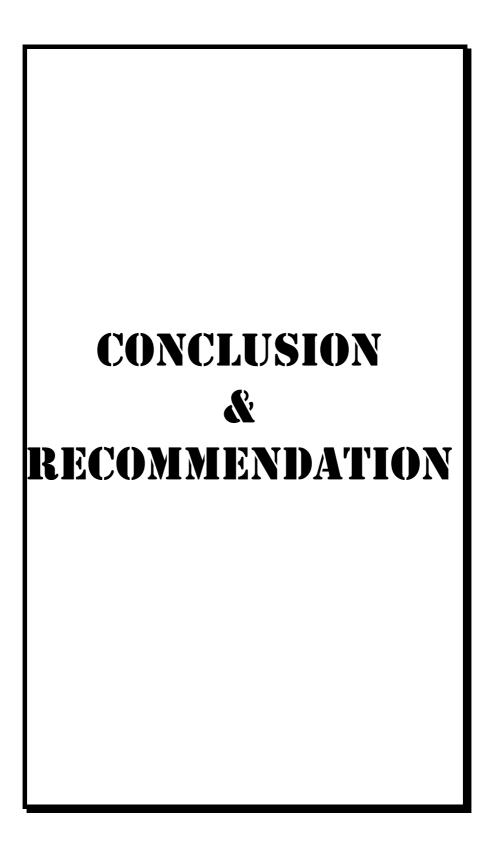
INTRODUCTION & AIM OF THE STUDY

REVIEW OF LITERATURE

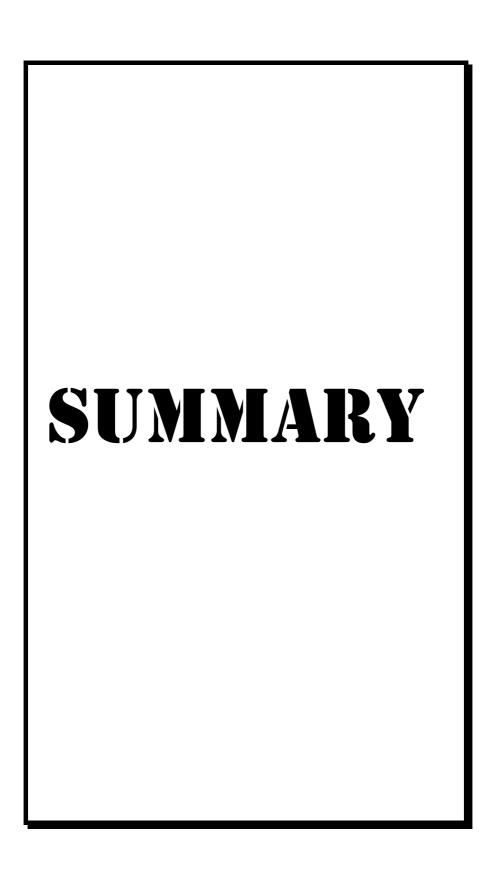
MATERIALS & METHODS

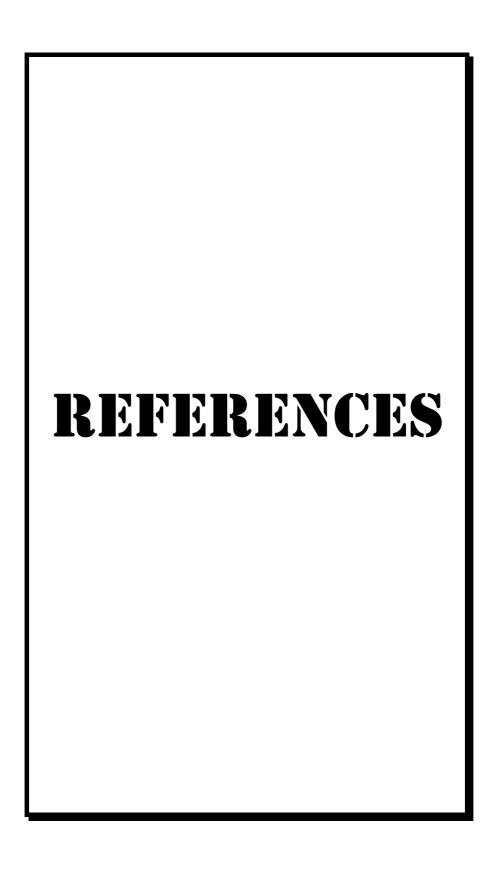












ARABIC SUMMARY

ACKNOWLEDGMENT

First and foremost we thank "ALLAH" the most merciful.

I would like to express my sincere gratitude to **Prof. Dr. Samir Nairooz Ibrahim** for his expert comments, constructive supervision and continuous encouragement and support.

I wish to express my cordial thanks and gratitude to **Prof. Dr. Suzi Hanafi Ibrahim** for her meticulous observations and her great support and patience.

I am deeply grateful to **Dr. Sahar M. Mahdy Omar** for her great help and continuous valuable instructions throughout this study.

Finally, I wish to extend my thanks and gratitude to all my professors and colleagues in Histology Department.

I cannot find enough words to express my deep love and thanks for my **parents** and **wife** for helping and encouraging me to produce this work.

TABLE OF CONTENTS

Contents	Pages
Introduction and aim of the study	1
Review of literature	3
Materials and methods	16
Results	26
Discussion	142
Conclusion and recommendations	155
Summary	156
Abstract	161
References	163
Arabic summary	

LIST OF ABBREVIATIONS

ACs	Aberrant crypts
ACF	Aberrant crypt foci
DMH	Di-methyl hydrazine
FFA	Free fatty acids
HFD	High fat diet
PCNA	Proliferating cell nuclear antigen
SCFA	Short chain fatty acids