



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



HANAA ALY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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Bacteriological Investigation on Helicobacter infection, A Cross- Sectional Study

A Thesis

*Submitted for Partial Fulfillment of Master
Degree in Veterinary Sciences
(Microbiology)*

By

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سبحانك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

سورة البقرة الآية: ٣٢

Acknowledgment

First and foremost, I feel always indebted to **ALLAH**, the Most Kind and Most Merciful.

I'd like to express my respectful thanks and gratitude to **Prof. Dr. Mahmoud Hashad**, Professor of Microbiology and Immunology and The Head of Microbiology Department, Faculty of Veterinary Medicine, Cairo University, for his keen guidance, kind supervision, valuable advice and continuous encouragement, which made possible the completion of this work.

I am also delighted to express my deepest gratitude and thanks to **Dr. Shaymaa Abdelmalek**, Lecturer of Microbiology and Immunology at Microbiology Department, Faculty of Veterinary Medicine, Cairo University, for her kind care, continuous supervision, valuable instructions, constant help and great assistance throughout this work.

I would like to express my everlasting gratitude to all of **The Staff Members of The Department of Microbiology** for their inspiration, encouragement and great support during this work.

Dedication

To **My Family** for their generous emotional support.

To **My Loving Husband** for his continuous encouragement, which brought the best out of me.

To **My Friends and Colleagues** for their support and cooperation during my research

To **The Patients** who agreed willingly to include themselves in my study and to accomplish this work.



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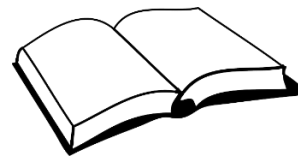
List of Abbreviations

Abb.	Full term
PNA-FISH.....	Peptide Nucleic Acid Fluorescent In Situ Hybridization
UBT	Urea Breath Test
PCR.....	Polymerase Chain Reaction
RNA	Ribonucleic Acid
rRNA	Ribosomal Ribonucleic Acid
CagA.....	Cytotoxin-Associated Gene A
VacA	Vacuolating cytotoxin A
OipA.....	Outer Inflammatory Protein A
dupA	Duodenal Ulcer Promoting Gene A
SabA	Sialic Acid–Binding Adhesin
BabA.....	Blood Group Antigen–Binding Adhesin
Hsp60	Heat Shock Proteins 60
IL-8.....	Interleukin-8
PPI.....	Proton Pump Inhibitor
NSAIDs	Non-Steroidal Anti-Inflammatory Drugs
MALDI-TOF.....	Matrix-Assisted Laser Desorption/Ionization Time-Of-Flight
DNA.....	Deoxyribonucleic Acid

Abstract

Helicobacter pylori (*H. pylori*) is the causative agent of the most cases of human gastritis. Unfortunately, there is no established accurate standard for the diagnosis of *H. pylori* infection. Several diagnostic tests have been employed for diagnosis of *H. pylori* infections. Culture, microscopic examination, histopathology, rapid urease test (RUT), serology, biochemical tests, antigen detection and molecular techniques all are tried. In the present study, 250 gastric biopsies were collected from male and female dyspeptic patients of different ages recruited to the Gastroenterology Unit at Ahmed Maher Hospital, a governmental hospital that is located at the west of Cairo metropolitan, from November 2019 to December 2020. Samples were subjected to bacteriological studies to isolate and identify *H. pylori*. Fifty isolates were identified as *Helicobacter* spp. according to the morphological and biochemical bases. The biochemical behavior was variable among different isolates. When a specific semi-nested PCR assay was applied on DNA extracted from the *helicobacter* isolates, only 5 were identified as *H. pylori* while the rest were considered as non- pyloric *helicobacters*. Therefore, a reliable diagnosis is crucial for better eradication therapy of *helicobacter*-originated infections in human and animals. Results of more than one test are required to elucidate the real causative agents of human gastritis and to detect animal carriers of *helicobacter*.

Keywords: *H. pylori*, – Biochemical diagnosis – Biopsy specimen – socioeconomic status – Bacterial culture.



Introduction
