

127, 17 27, 17 (20) 77, 17 (20









جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بللله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأفلام قد اعدت دون آية 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 %



ثبكة المعلومات الجامعية





Information Netw. " Shams Children Sha شبكة المعلومات الجامعية @ ASUNET بالرسالة صفحات لم ترد بالأص

ENZYME-LINKED IMMUNO-SORBENT ASSAY VERSUS DIRECT MICROSCOPY IN DIAGNOSIS AND CURE ASSESSMENT OF GIARDIA LAMBLIA INFECTION

Thesis

Submitted for the partial fulfillment Of Master degree in parasitology

By Sabah Abd Elgany Ahmed Ebrahim M.B.,B.Ch.

Demonstrator of Parasitology, Parasitology Department, Faculty of Medicine, Ain Shams University

Supervisors

 Prof. Dr./Ahmed Fouad Ahmed Fawzy Tawfic
 Professor of Parasitology, Parasitology Department, Faculty of Medicine, Ain Shams University

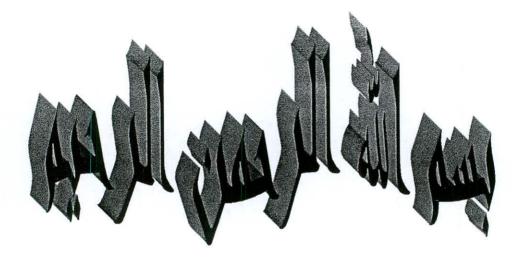
Prof. Dr./Ahmed Onsi Mohamed Ahmed Elsorogy
Professor of Parasitology, Parasitology Department, Faculty of Medicine, Ain Shams University

Dr./ Maha Marzouk Mustafa Abo Gamra
Assistant Professor of Parasitology, Parasitology Department,
Faculty of Medicine, Ain Shams University

Faculty of Medicine Ain Shams University 2001

B V 000







Acknowledgement

First & foremost, thanks are due to God, the most beneficent & merciful of all

I wish to express my deep gratitude to Prof. Dr. Ahmed Fouad Ahmed Fawzy Tawfic, Professor of Parasitology, Faculty of Medicine, Ain Shams University, for his faithful supervision, precious help, constant guidance, and sincere encouragement.

I would like to express my deep appreciation to Prof. Dr. Ahmed Onsi Mohamed Ahmed Elsorogy Professor of Parasitology, Faculty of Medicine, Ain Shams University, for his sincere help, valuable advice, generous cooperation and continuous support.

My deepest thanks to Ass. Prof. Dr. Maha Marzouk Mustafa Abo Gamra Assistant Professor of Parasitology, Faculty of Medicine, Ain Shams University, for her enormous effort, indispensable assistance and meticulous supervision on every part of this work.

I am deeply grateful to Prof. Dr. Magda El-Sayed Azab, Professor of Parasitology, Faculty of Medicine, Ain Shams University, for her assistance and precious help in providing the materials needed for this work.

I would like to express my special thanks to Prof. Dr. Nabila Hefny Mohamed Professor and Head of Parasitology Department, Faculty of Medicine, Ain Shams University, for her sincere encouragement.

I wish to thank all staff members of the parasitology Department, Faculty of Medicine, Ain Shams University for their kind help.



Enzyme-linked immuno-sorbent assay versus direct microscopy in diagnosis and cure assessment of *Giardia lamblia* infection

By Sabah abd Elgany Ahmed Ibrahim Parasitology department, Faculty of Medicine, Ain Shams University

Abstract

Giardia lamblia is the most common human protozoan enteropathogen throughout the world. Microscopic examination of the stool is the gold standard for diagnosis of giardiasis despite this method gives high percentage of false negative results due to intermittence of Giardia lamblia cycle. In the present study, a commercially available enzyme linked immunosorbent assay (ELISA) for detection of Giardia lamblia antigen in stool was evaluated as a diagnostic method of giardiasis and also as a method of cure assessment after treatment. The results showed that all microscopically positive cases for Giardia lamblia were positive for Giardia antigen by ELISA, yielding sensitivity 100% for ELISA. It was found that 23.3% of the microscopically negative cases for Giardia lamblia were positive for Giardia antigen by ELISA, giving specificity 76.7% for ELISA. Those cases may be either true positive cases of giardiasis missed microscopically because of intermittence of Giardia cycle, or false positive cases indicating lower specificity of the test. There was a positive correlation between the number of Giardia cysts and the level of Giardia antigen. As regard the cure assessment, the results showed that the level of Giardia antigen decreased significantly after treatment. It was concluded that ELISA detecting Giardia antigen was a highly sensitive (100%) and a fair specific (76.7%) diagnostic method for giardiasis. ELISA may be a good alternative for giardiasis diagnosis, especially when fecal examination was repeatedly negative and before shifting to the other invasive methods of diagnosis. It is also concluded that ELISA is an accurate and reliable method for cure assessment after treatment of giardiasis. Keywords: Giardia lamblia, coproantigen, immunodiagnosis, cure assessment



List of contents

	Page No.
- Introduction	1
- Aim of the work	3
- Review of literature	4
 Historical notes & Taxonomy of G. lamblia Morphology & Structure Life avala 	4 8
Life cycleMetabolismEpidemiology of giardiasis	14 20 23
PathologyPathogenesisImmunology & Immune response	30 35 39
 Clinical features Diagnosis Treatment 	46 52 59
Prevention	64
- Materials & Methods	66
- Results	80
- Discussion	100
- Summary	115
- Conclusion & Recommendations	118
- References	120
Arahic summary	

