



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية
@ ASUNET



شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

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



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of
15-25- c and relative humidity 20-40%

بعض الوثائق الأصلية تالفة

بالرسالة صفحات لم ترد بالاصل



Faculty of medicine

SOME ASPECTS OF SYSTEMIC TOXICITY PROFILE OF SCORPION STING, A CLINICO-EXPERIMENTAL STUDY

Thesis

Submitted for

Partial fulfillment of

Master. degree of Clinical Toxicology

By

AHMED HEFNAWY ABBAS

(M.B.B.ch.)

Resident of clinical toxicology, faculty of Medicine

El-Minia University

Supervised by

Prof. Dr. ALY HUSSEIN MOHAMED OMAR

Professor and head of department of Forensic

Medicine and Toxicology

Faculty of medicine

El-Minia University

Dr. GHADA MOUSTAFA ABD-EL AZZIM

Lecturer of Forensic Medicine and Clinical Toxicology,

Faculty of Medicine

El-Minia University

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ ١ خَلَقَ

الإنسان من علق ٢ اقْرَأْ وَرَبُّكَ

الأكرم ٣ الَّذِي عَلَّمَ بِالْقَلَمِ ٤

عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمَ ٥

صَدَقَ اللَّهُ الْمَظْهَرِ



DEDICATION

TO MY FATHER

TO MY MOTHER

TO MY BROTHERS

ACKNOWLEDGMENT

At the first of all, great thanks to **ALLAH**, the most merciful, the most gracious, who helps me to accomplish this work .

It's a great pleasure to express my sincere gratitude to **Prof . Dr . Aly Hussein Mohamed Omar**, Professor and Head of Forensic Medicine and Clinical Toxicology Dept., Faculty Of Medicine, El-Minia university for his kind guidance, keen supervision, unlimited support, continuous indispensable advice, and expert efforts throughout all the steps of the work.

No words can express my deepest appreciations to **Dr. Ghada Mustafa Abd El-Azeim** lecturer of Forensic Medicine and Clinical Toxicology Dept., Faculty Of Medicine, El-Minia university, for her valuable advice, encouragement, tremendous help, and kind sincere help.

My deepest gratitude to **Dr. Heba Mohamed Tawfeek** lecturer of pathology Dept., Faculty Of Medicine, El-Minia university, for her kindness, honest help, and co-operation through the histopathological part of the study.

I would like to express my sincerest appreciation to the Egyptian organization for biological products and vaccines (**Vacsera®**) for providing me with scorpion venom, and the necessary information to accomplish the experimental part of this work.

Lastly I wish to express my deep thanks to all my colleagues and all workers in the department of Forensic Medicine and Clinical Toxicology dept., faculty of Medicine, El-Minia university, for their great help and sincere encouragement.

Lastly I wish to express my deep thanks to all my colleagues and all workers in the department of Forensic Medicine and Clinical Toxicology dept., faculty of Medicine, El-Minia university, for their great help and sincere encouragement.

List of Content

<i>Subject</i>	<i>Page</i>
List of content.	i
List of Abbrevations.	iii
List of Figures.	iv
List of Histograms.	vi
List of Pictures.	vii
List of Plates.	ix
List of Tables.	xi
Introduction.	1
Aim of the Work .	1
Review of Literature :	2-56
Chapter 1: Historical Aspect.	2
Chapter 2: Biology Of Scorpions.	4
Chapter 3: The venom Of Scorpions.	11
Chapter 4: Scorpions In Egypt.	20
Chapter 5: Pathogenesis Of Scorpion Envenomation.	25
Chapter 6: Clinical Picture Of Scorpion Envenomation.	29
Chapter 7: Diagnosis Of Scorpions Envenomation.	37
Chapter 8: Treatment Of scorpions Envenomation .	41
Material And Methods.	57
Results.	72
Discusssion.	119

<i>Subject</i>	<i>Page</i>
Summary.	127
Conclusions.	130
Recommendations.	132
References.	136
Arabic Summary.	v - 1

List of Abbreviations

<i>Abbreviations</i>	<i>Mean</i>
ALT	Alanine transaminas.
ANOVA	Analysis of variance.
AST	Aspartate transaminase.
ASV	Anti scorpion venom.
BUN	Blood urea nitrogen.
CK-MB	Creatine phosphokinase cardiac isoenzyme.
CTnI	Cardiac Troponin I.
ECG	Electrocardiogram.
ELISA	Enzyme linked immunosorbent assay.
IU/L	International unit / liter.
gm/dl	gram /deciliter.
H&E	Hematoxylin and eosin.
Hb	Hemoglobin.
IL-1, IL-6, IL-8	Interleukin 1, 6, 8 .
L.D.H	Lactate dehydrogenase.
Leiurus q.	Leiurus quinquistraiatus.
MAP	Mean arterial pressure.
mg/dl	Milligram/ deciliter.
ng/ml	nanogram / milliliter.
P.C.C	Poison control center.
Pco₂	Carbon dioxide tension .
R.B.Cs	Red blood corpuscles.
R.I.A	Radio immune assay.
W.B.Cs	White blood cells.
U/ml	Unit / mililiter.

List of Figures

<i>Figures</i>	<i>page</i>
Fig.(1): showing sex difference between scorpion sting cases	72
Fig. (2): showing the geographical variation between scorpion sting cases.	73
Fig. (3): showing the seasonal variation of scorpion sting.	74
Fig. (4): showing the anatomical difference of the site of scorpion sting cases.	75
Fig. (5): showing the most commonly clinical manifestation in scorpion sting cases.	76
Fig. (6): showing the most used dosage of ASV in scorpion sting cases.	77
Fig. (7): showing the most commonly applied first aid measures used in Egypt for scorpion sting cases.	79
Fig. (8): Mean of RBCs count in clinical group.	81
Fig. (9): Mean of Hb% in clinical group.	81
Fig. (10): Mean of total leucocytic count in clinical group.	82
Fig. (11): Mean of platelets count in clinical group.	82
Fig. (12): Mean of AST in clinical group.	84
Fig. (13): Mean of ALT in clinical group.	84
Fig.(14): Mean of blood urea in clinical group.	85
Fig. (15): Mean of serum creatinine in clinical group.	85
Fig.(16): Comparison of mean values of LDH in patients with severe envenomation according to outcome (24 hours after admission).	92
Fig.(17): Comparison of mean values of Troponin-I in patients with severe envenomation according to outcome (24 hours after admission).	92
Fig.(18): Comparison of mean values of CPK in patients with severe envenomation according to outcome (24 hours after admission).	93
Fig.(19): Comparison of mean values of CPK-MB in patients with severe envenomation according to outcome (24 hours after admission).	93