

Dedication

I dedicate this work to,

My family in thanks for all of their loving support.....and encouraging me to challenge myself....

Acknowledgement

I would like to express my gratitude to Dr.Bassam for being an outstanding advisor and excellent supervisor. His constant encouragement, support, and invaluable suggestions made this work successful.

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Abstract

This study analyzed data collected during the periods from (January 2006) to (November 2006) Rashid village in Gadarif state. These data represented information about the immunity of Leishmaniasis disease.

Three surveys were carried out by the group of researchers from the Institute of Endemic diseases. The main study sample was children of the ages between (6 – 19) years.

This study examined the different factors immunity impregnability associated with the disease influence, epidemiology and prevalence.

The objective of this study is to use the logistic regression model to determine the immunity factors which is more effectively in disease.

This research depends on the Statistical Package for Social Sciences (SPSS) in the analysis and getting the result of the data.

The results showed that in this study the female proportion was higher than the male. And the result showed that the Massalet has higher percentage than the other Tribes. Also we could observe that there was a high negative proportion in the tests Leishmanin Skin Test (LST) (and Direct Agglutination Test (DAT) and Polymerases Chain Reaction (PCR).

From our results and from a statistical view we recommend using Leishmanin Skin Test (LST) and Direct Agglutination Test (DAT) as a good diagnostic tests for Leishmaniasis in Sudan.

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(2006) (2006) .

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(DAT) (LST) .

List of Abbreviations

AIDS	:	Acquired Immunodeficiency Syndrome
BCG	:	Bacillus Calmette-Guérin
CL	:	Cutaneous Leishmaniasis
ELISA	:	Enzyme-Linked Immunosorbent Assay
HIV	:	Human Immunodeficiency Virus
IFAT	:	Indirect Immunofluorescent Antibody Test
IL	:	Interleukin Leishmaniasis
KDNA	:	Kinetoplast DNA
MCL	:	Muco-Cutaneous Leishmaniasis
ML	:	Maximum Likelihood
MP	:	Maximum Parsimony
PCR	:	Polymerases Chain Reaction
LST	:	Leishmanin Skin Test
VL	:	Visceral Leishmaniasis
DAT	:	Direct Agglutination test
PKDL	:	Post Kala-azar Dermal Leishmaniasis
ABCD	:	Amphotericin B Cholesterol Dispersion
ABLC	:	Ampho-tericin B Lipid Complex
P_Infec	:	Leishmania Past-Infection

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