

**Evaluation of Platelet Function, T-
lymphocyte and Eosinophils in Patients
with Schistosomiasis**

Thesis

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

«وَأَسْأَلُ اللَّهَ عَالِمَ الْغُيُوبِ

وَالْحَكِيمَ وَعَلِيمَ مَا لَمْ يَكُنْ يَعْلَمُ

وَكُنْ فَصَلِّ اللَّهَ عَالِمَ الْعَظِيمِ»

صدق الله العظيم

(آية ١١٣ سورة النساء)

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List of ABBREVIATIONS

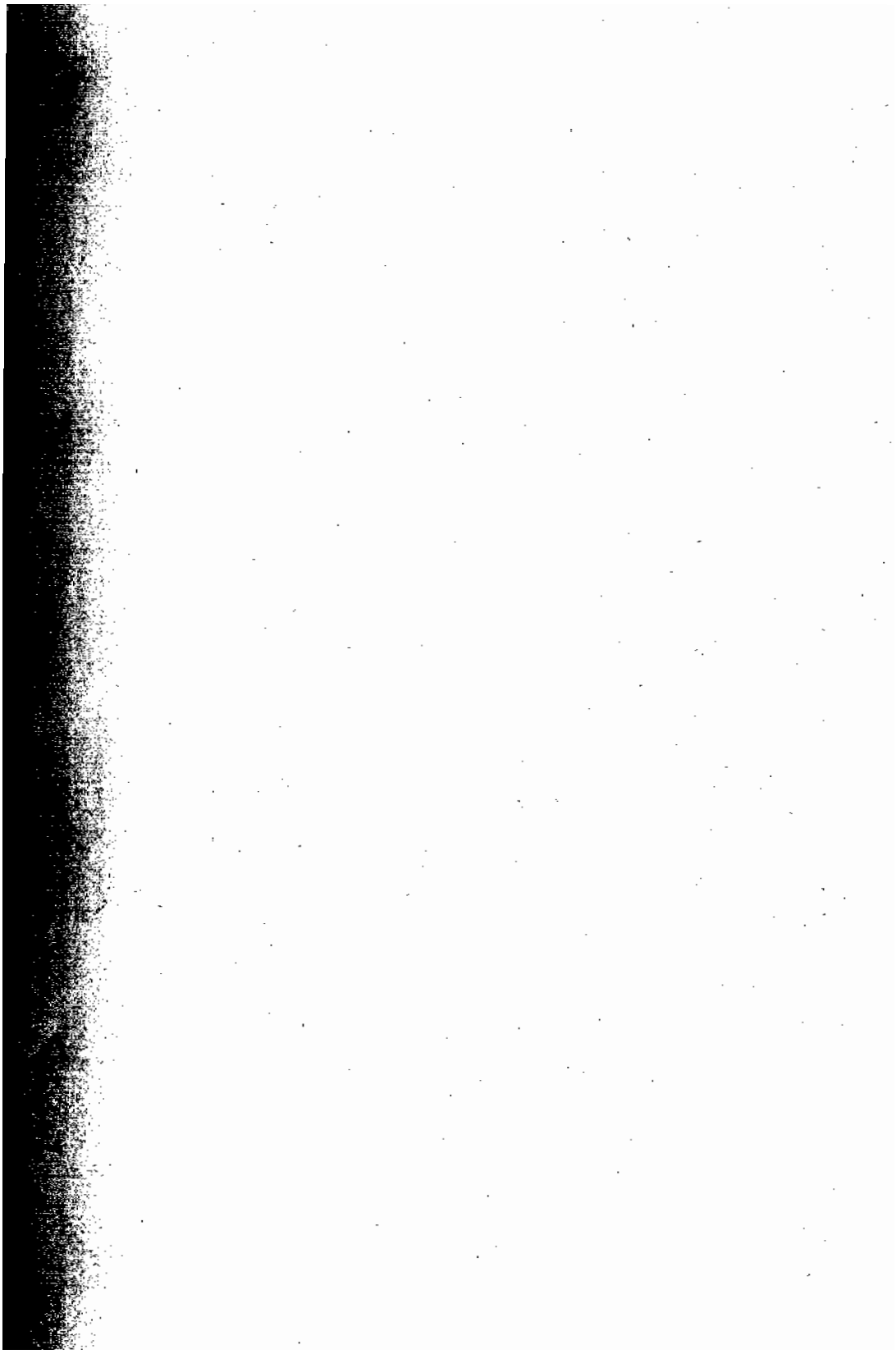
ADCC	: Antibody dependent Cell Mediated Cytotoxicity
BCG	: Bacilli Calmette- Guérine
C1a	: Complement 1a
CD	: Cluster of Differentiation
Con- A	: Concanavalin- A
CSF-1	: Colony Stimulating Factor-1
E- rosette	: Erythrocyte- rosette
FDPs	: Fibrin Degradation Products
FCM	: Flowcytometry
Fc εRI	: Fragment Crystallizable- Epsilon Receptor-1
GM-CSF	: Granulocyte-Macrophage Colony Stimulating Factor
H ₂ receptor	: Histamine receptor
Ig	: Immunoglobulin
IFN-γ	: Interferon- gamma
IL	: Interleukin
LPS	: Lipopolysaccharide
LT-B ₄	: Leukotriene- B ₄
mAb	: Monoclonal antibodies
NK	: Natural Killer
OKT	: Orthodiagnostic Kit
PBMN	: Peripheral Blood Mononuclear Cells
PAF	: Platelets Activating Factor
PASL	: Platelet Activating Suppressor Lymphokine
PAIgG	: Platelet Associated Immunoglobulin- G

SRP	: Schistosoma Released Product
SEA	: Soluble Egg Antigen
SIRS	: Soluble Immune Response Suppressor
SWAP	: Soluble Worm Antigen Preparation
Th	: T- helper
TNF- α	: Tumour Necrosis Factor- alpha

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INTRODUCTION



Introduction

Schistosomiasis is a disease of major public health importance affecting millions of people in tropical and subtropical areas (Chandiwana et al., 1987).

In Egypt, Schistosomiasis continues as a leading health problem due to wide spread prevalence, serious morbidity and a significant implication of the national economy (Nassif, 1987).

Recently, the blood platelets, whose normal function is to promote clotting and tissue health at the site of a wound, have been demonstrated to play a role in combating parasitic worms such as Schistosoma mansoni. Platelets taken from Schistosoma mansoni infected patient showed highly cytotoxic properties in vitro against Schistosoma mansoni larvae (Pancre et al., 1989). This protective mechanism required the presence of specific IgE antibodies that interacted with a low affinity receptor, for IgE, present on the blood platelets membrane (Joseph et al., 1986).

So, demonstration of the immunological potentialities for platelets in schistosomiasis raised the question of possible regulation through T-cell products (Pancre et al., 1988).

