PARVOVIRUS B19 INFECTION IN PATIENTS WITH ERYTHEMA INFECTIOSUM, ARTHROPATHY AND CHRONIC HAEMOLYTIC ANAEMIA

Thesis
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By
Hoda Mahmoud Osman
(M.B., B.Ch., M. Sc.)

Supervisors

Prof. Dr. ISLAH HASSAN EL-FALAKY
Professor of Clinical and Chemical Pathology

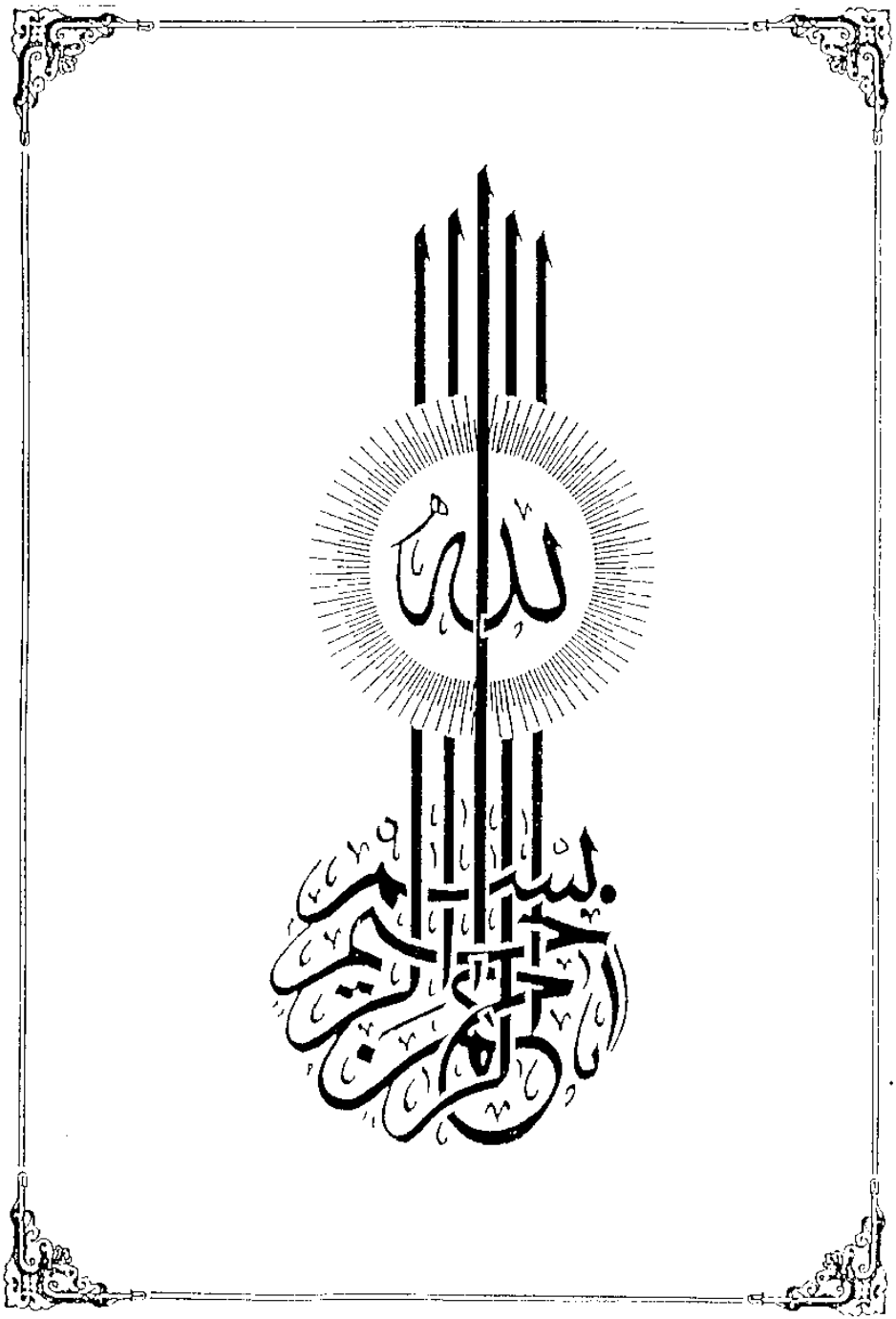
Dr. MONA HUSSEIN EL SAMAHY
Professor of Pediatrics

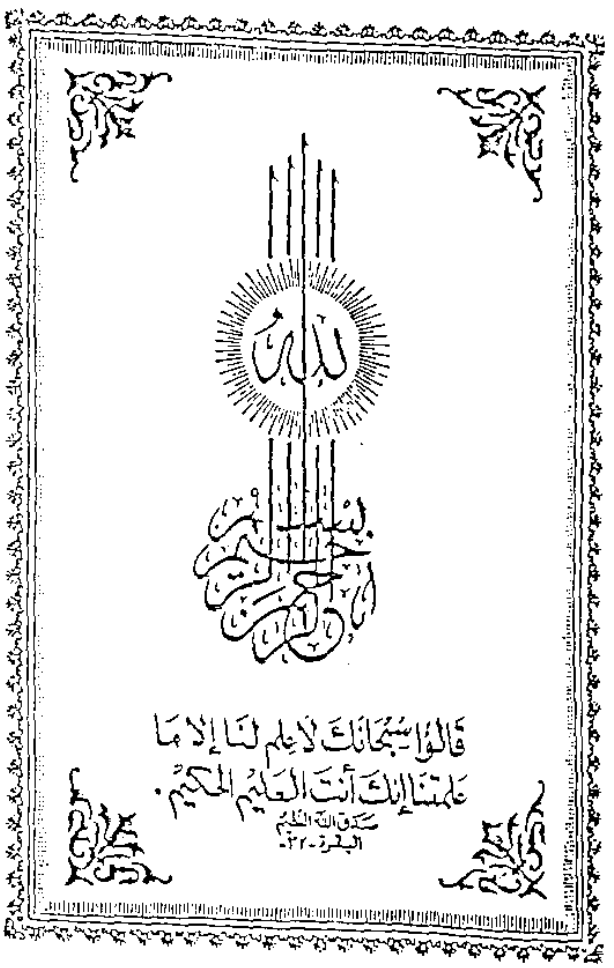
Dr. HADIA HUSSEIN BASSIM
Ass. Prof. of Clinical and Chemical Pathology

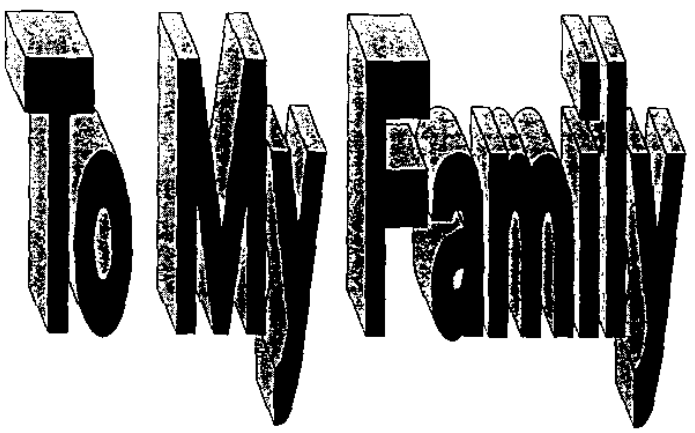
Dr. MAGDA SALAH EL-DIN GABR
Ass. Prof. of Clinical and Chemical Pathology

Dr. NEVINE NABIL KASSEM
Ass. Prof. of Clinical and Chemical Pathology

Faculty of Medicine
Ain Shams University
1996







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ABSTRACT

Human parvovirus B19 is a small, single-stranded DNA virus belonging to the taxonomic genus *autonomous parvovirus* of the family *parvoviridae*.

In the present study, our aim was to assess the importance of parvovirus B19 infection in cases of erythema infectiosum (groyp I, n=22), chronic haemolytic anaemia (group II, n=21) and arthralgia (group III, n=22) by detection of parvovirus B19 antigen using counter immunoelectrophoresis and IgM and IgG viral antibodies using ELISA technique.

Our results showed that in group I (EI) parvovirus B19 IgM antibodies were detected in 41%. In group II (CHA) evidence of recent parvovirus B19 infection (antigen and/or IgM) were detected in 7 out 21 cases, 5 of them suffered from aplastic crisis. In group III (arthropathy) parvovirus B19 IgM and IgG antibodies were detected in 54.4%.

We conclude that parvovirus B19 infection could be considered as a causal association with arthropathy and gave a strong support to the proposition that parvovirus B19 is the specific cause of erythema infectiosum and aplastic crisis in chronic haemolytic patients.

LIST OF ABBREVIATIONS

AAV:	Adeno-associated virus.
AIDS:	Acquired Immuno deficiency syndrome.
CDC:	Centers for Disease control.
cDNA:	Complementary DNA.
CFU-E:	Colony-forming unit-Erythyroid.
CHA:	Chronic haemolytic anaemia.
CIE:	Counter current Immuno Electrophoresis.
CPV:	Canine Parvo Virus.
DBA:	Diamond Blackfan anaemia.
DNA:	Deoxyribonucleic acid.
EI:	Erythema Infectiosum.
ELISA:	Enzyme linked Immunosorbent Assay.
EM:	Electron Microscopy.
FCS:	Fetal calf serum.
FPV:	Feline parvovirus.
HBsAg:	Hepatitis B surface antigen.
HLA:	Human leucocyte antigen.
HPV-B19:	Human parvovirus B19.
IEM:	Immuno-Electron-Microscopy.
IFA:	Indirect Immuno fluorescence Assay.
IgG:	Immunoglobulin G.
IgM:	Immunoglobulin M.
ISPCR:	In situ polymerase chain reaction.
ITP:	Idiopathic thrombocytopenic purpura.
nM:	Nanometer.
O.D:	Optical density
PCR:	Polymerase chain reaction.
RA:	Rheumatoid Arthritis.
RF:	Rheumatoid Factor
RPHA:	Reverse passive hemagglutinatin.
RIA:	Radio Immuno Assay.
TAC:	Transient Aplastic Crisis.
TEC:	Transient Erythroblastopenia of Childhood.

LIST OF FIGURES