

**PREVALENCE OF RUBELLA IN MENTAL RETARDATION
IN
EGYPTIAN CHILDREN**



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By

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1992

To my family



To my family

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The candidate.

LIST OF ABBREVIATIONS

A.A.M.D.	American Association of Mental Deficiency
BHK	Baby Hester Kidney Cell Culture
CF	Complement Fixation
CSF	Cerebrospinal Fluid
ELISA	Enzyme Linked Immuno Sorbet Assay
FIA	Fluorescence Immunoassay
HIT	Haemoagglutination Inhibition Test
IgM	Immunoglobulin M
IgG	Immunoglobulin G
IQ	Intelligence Quotient
ISG	Immune Serum Globulin
PHA	Passive Haemoagglutination
RIA	Radioimmunoassay
RNA	Ribonucleic Acid
UK	United Kingdom
U.S.A.	United States of America
WHO	World Health Organization

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INTRODUCTION AND AIM OF THE WORK

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Mental retardation is a state of arrested or incomplete development of mind. About 3 percent of the population are mentally handicapped, but the majority of these are in the mildly affected or educationally subnormal range (Birth et al., 1970).

Mental retardation is caused by many factors, endocrinal, genetical; inborn errors of metabolism, chromosomal disorders or exposure of the mother during pregnancy to irradiation, trauma, drugs and infections as toxoplasmosis, cytomegalovirus, syphilis, herpes, rubella and other infections [TORSH] (Bell and McQcomick, 1971).

The newborn infant suffering from intrauterine infection, may present with hydrocephaly or microcephaly, jaundice, enlarged liver and spleen, purpura and anemia which may also be found in cases of intrauterine infections. Congenital rubella syndrome results from trans-placental transmission of the virus to the foetus from an infected mother in early pregnancy (Koops and Battaglia, 1987).

Individual risk of congenital rubella depends upon the trimester of pregnancy in which maternal infection occurs (Birth et al., 1970).

The severity of damage may vary from mild auditory disease to multi-system or organ affection as affection of the eye, throat, lymph node, lung, and mentality (South and Sever, 1985). Congenital rubella normally remain stable but a progressive panencephalitis has been reported as a late manifestation (Kocen and Matthew, 1987).

The aim of this study is to detect the prevalence of anti-rubella antibodies, IgM and IgG, in children suffering from mental retardation and to find the relation between the level of these immunoglobulins in blood and the severity of the disease.

REVIEW OF LITERATURE