

FAECAL SECRETORY IgA IN :
CASES OF ACUTE PARALYTIC POLIOMYELITIS

Thesis Submitted For Partial Fulfilment Of
Master Degree In Pediatrics

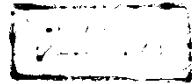
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



DEDICATION

TO THE SOUL OF MY FATHER,
I always try to deserve being his daughter .

TO MY MOTHER AND TO MY BROTHER,
Their loving, understanding, patient support was of
endless value.

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ABBREVIATIONS

BALT	: bronchial -associated lymphoid tissue.
B cells	: bone marrow derived lymphocytes.
DNA	: deoxyribonucleic acid.
GALT	: gut-associated lymphoid tissue.
H chain	: heavy chain.
IgA	: immunoglobulin A.
IgA ₁	: subclasses of IgA.
IgA ₂	
(IgA) ₂	: IgA dimer.
(IgA ₂).SC.	: IgA dimer connected to secretory component molecule.
(IgA) ₂ -J. SC	: structural formula of secretory IgA.
IgD	: immunoglobulin D.
IgE	: immunoglobulin E.
IgG	: immunoglobulin G.
IgG ₁	: subclasses of IgG.
IgG ₂	
IgG ₃	
IgG ₄	
IgM	: immunoglobulin M.
IPV	: inactivated poliovaccine.
im	: intramuscular.
in	: intranasal.
L chain	: light chain.
LC Partigen	: low concentration Partigen .
MALT	: mucosal- associated lymphoid tissue.
NP	: nasopharyngeal.
OPV	: oral polio vaccine.
P	: probability.
po	: peroral.
PP	: Peyer's patches.
RNA	: ribonucleic acid.

r test	: correlation test.
SC	: secretory component.
SD	: standard deviation.
S IgA	: secretory IgA.
T $\propto$ cells	: T-cells bearing receptors for IgA.
T cells	: thymus derived lymphocytes.
TGEV	: transmissible gastroenteritis virus.
TIPV	: trivalent inactivated poliovaccine.
TOPV	: trivalent oral poliovaccine.
t test	: significance test.
X	: mean.

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INTRODUCTION

INTRODUCTION

Poliomyelitis is a systemic infectious disease of widely varying severity which prominently affects the central nervous system and rarely is complicated by paralysis. (Young, 1981).

The protective role of secretory antibody in immunity against poliomyelitis is of considerable importance . The antibodies in nasopharynx and alimentary canal afford significant protection against reinfection with poliovirus, even in the absence of circulatory poliovirus antibodies. (Ogra and Karzon, 1970).

There is predominance of IgA in the external secretions and the IgG/ IgA ratio is often less than 1 , compared to 4:1 or 5 : 1 in serum. (Tomasi , 1982).

AIM OF THE WORK