

**Estimation of Granulocyte-Macrophage Colony
Stimulating Factor in Sera of Asthmatic
Children and Its Correlation to
Their Pulmonary Functions**

مقدمة

THESIS

Submitted for partial fulfillment of
MD Degree in Pediatrics

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1996



A. 10/10/96





ACKNOWLEDGMENT

To the **Almighty God**, to Him, whose knowledge is beyond all knowledge, I kneel to express the very humble gratitude of one of His very humble subjects.

I would like to express my utmost gratitude to my eminent **Professor Dr. Karima Ahmed Abd El-Khalek**, Professor of Pediatrics, Ain Shams University, for giving me this precious opportunity of working under her supervision, her vast knowledge, wide experience and guidance added much to this work.

I am also indebted to **Dr. Magda Yehia Hussein**, Assistant Professor of Pediatrics, Ain Shams University. I will always remember her kind help, meticulous supervision and constant encouragement.

I am also deeply indebted to the great help offered by **Dr. Laila Mahmoud Abd El-Ghaffar**, Lecturer of Pediatrics, Ain Shams University, to whom I owe many valuable remarks and a lot of precious time and effort.

I would like also to thank **Dr. Huda Mohamed El-Guindi**, Lecturer of Clinical Pathology, Ain Shams University, her guidance and kind assistance supported the practical part of this work.

Last but not least, my deep appreciation is expressed to my family and to all patients of the Pediatric Chest Clinic of Ain Shams University.

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ABBREVIATIONS

AM	At morning.
ANS	Autonomic nervous system.
APC	Antigen presenting cell.
ATP	Adenosine triphosphate.
ATS	American Thoracic Society.
BALF	Bronchoalveolar lavage fluid.
BFU	Burst forming unit.
BHR	Bronchial hyperresponsiveness.
C ₃	Complement 3.
Ca ⁺⁺	Ca ions.
CAMP	Cyclic adenosine monophosphate.
CD	Cluster of differentiation.
EAR	Early asthmatic response.
ECFA	Eosinophil chemotactic factor of anaphylaxis.
ECP	Eosinophil cationic protein.
EDN	Eosinophil derived neurotoxin.
EIA	Exercise-induced asthma.
Epi	Epinephrine.
Epo	Erythropoietin.
FEF _{25-75%}	Forced expiratory flow.
FEV ₁	Forced expiratory volume in 1 second.
FRC	Functional residual capacity.
FVC	Forced vital capacity.
GM-CSF	Granulocyte macrophage colony stimulating factor.
H receptor	Histamine receptor.
HGFs	Haemopoietic growth factors.
HILV-II	Human immunolymphocyte virus II.
HLA	Human leukocyte antigen.
HS	Highly significant.
ICAM-1	Intracellular adhesion molecule 1.
IFN	Interferon.
IgE	Immunoglobulin E.

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IL	Interleukin.
LAR	Late asthmatic response.
LT	Leukotriene.
MBP	Major basic protein.
MDI	Metered dose inhaler.
Meg-CSF	Megakaryocyte colony stimulating factor.
NAEP	National asthma education program.
NANC	Non adrenergic non cholinergic.
NCF	Neutrophil chemotactic factor.
NEP	Neutral endopeptidase.
NO	Nitric oxide.
No	Number.
NS	Non significant.
P	Probability of error.
PAF	Platelet activating factor.
PEFR	Peak expiratory flow rate.
PG	Prostaglandin.
PKA	Protein kinase A.
RAST	Radioallergosorbent test.
RSV	Respiratory syncytial virus.
RV	Residual volume.
SCF	Stem cell factor.
SD	Standard deviation.
SP	Substance P.
TGF- β	Transforming growth factor-beta.
T _{H1}	T helper 1.
TLC	Total leukocytic count.
TNF	Tumour necrosis factor.
TXA ₂	Thromboxane A ₂ .
VCAM	Vascular cell adhesion molecule.
VIP	Vasoactive intestinal peptide.
WLRI	Wheezy lower respiratory illness.

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