

CONTENTS

	Page
	I
List of Abbreviations	ii
List of Tables	iv
List of Figures	1
Introduction and aim of the work	3
Review of literature	3
Definition and epidemiology	14
Genetic and asthma	18
Anatomic development	21
Autonomic nervous system	23
Infection and asthma	27
Exercise induce asthma	29
Inflammatory cell	33
Pathophysiology	50
Cytokine	57
Complement.	65
Management	71
Subjects and Methods	78
Results	110
Discussion	125
Summary and conclusions	127
Recommendations	128
References	
Protocol	
Arabic summary	

LIST OF ABBREVIATION

AHR	Airway hyper responsiveness
BAL	Bronchoalveolar lavage
CD	Cluster of differentiation
CNS	Central nervous system
ECP	Eosinophil cationic protein
EIA	Exercise induce Asthma
GM-CSF	Granulocyte macrophage-colony stimulating factor
IFN	Interferon
ILS	Interleukins
Ig	Immunoglobulin
PG	Prostaglandin
PNL	Polymorphonuclear leucocytes.
TGF	Transforming growth factor
TNF	Tumor necrosis factor

LIST OF FIGURES

1. FIGURE OF REVIEW OF LITERATURE

Number	Title	Reference	Page
1	Pathophysiology of asthma	McFadden et al. 1980	38
2	The complement cascade.	(Daniel et al. 1999)	65

2. FIGURES OF RESULTS

Number	Title	Page
3	Age distribution among the studied groups.	80
4	Sex distribution among the studied groups.	81
5	Comparison between the level of PEFR (Lm) in control group and in patients group before and after treatment	85
6	Comparison between the level of IgE in control group and in patients group before and after treatment	88
7	Comparison between the level of eosinophil cell/mm ³ in control group and in patients group before and after treatment	92
8	Comparison between the level of ECP in control group and in patients group before and after treatment	96
9	Comparison between the level of IL-1 in control group and in patients group before and after treatment	101

supervision and efforts to complete this work. He always had a sympathetic ear and his continual encouragement and great support have been most helpful to me.