MYCOPLASMAL INFECTION IN PNEUMONIAS, ANAEMIAS AND LEUKAEMIAS

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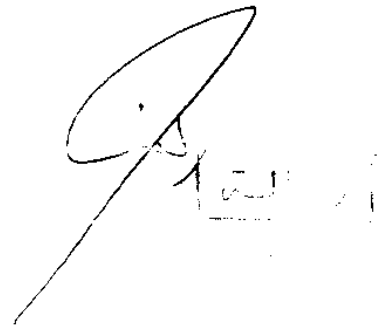

FACULTY OF MEDICINE

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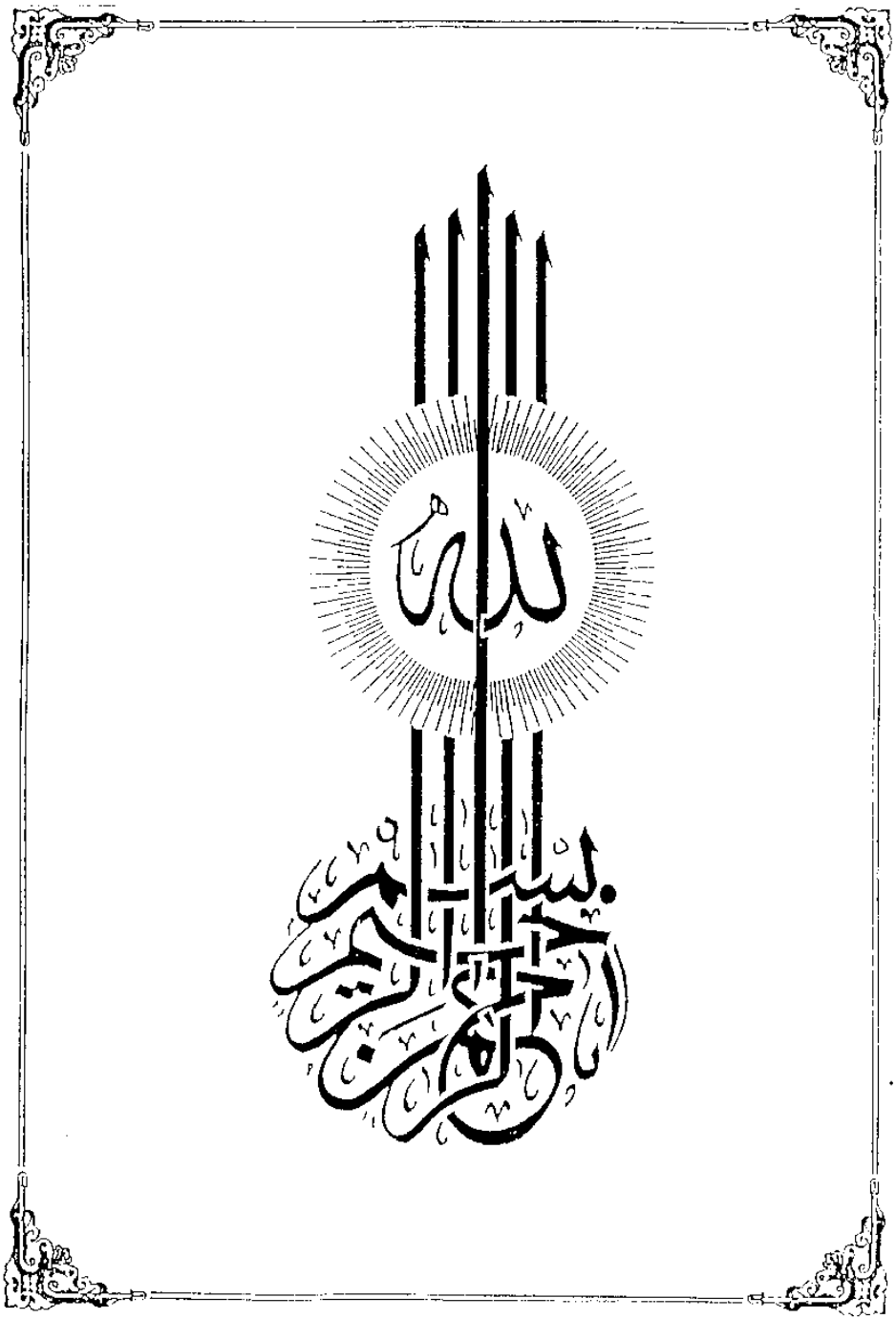

DEDICATED TO MY PARENTS

HUSBAND

AND CHILDREN

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ABREVIATIONS

Alkaline phosphatase	AP
Autoimmune haemolytic anaemia	AIHA
Bronchoalveolar lavage	BAL
Calcium chloride	$Cacl_2$
Central nervous system	CNS
Cerebrospinal fluid	CSF
Cold haemagglutinin	CHA
Complement component one	C_1
Complement fixation	CF
Copper	CO^{2+}
Deoxynucleic acid	DNA
Disodium hydrogen phosphate	Na_2HPO_4
Enzyme-Linked immunosorbent assay	ELISA
Erythrocyte sedimentation rate	ESR
Ethylene diamine tetra-acetic acid	EDTA
Ferrous	Fe^{2+}
Growth inhibition	GI
Haemoglobin	Hb
Immunobinding assay	IBA
Immunofluorescent	IF
Immunoglobulin A	IgA
Immunoglobulin G	IgG
Immunoglobulin M	IgM
Indirect haemagglutination	IHA
Magnesium	Mg^{2+}
Magnesium chloride	$Mgcl_2$
Manganese	Mn^{2+}
2 Mercapto ethanol	2 M.E.
Mycoplasma hominis	M. hominis
Mycoplasma genitalium	M. genitalium
Mycoplasma Orale	M. Orale
Mycoplasma pneumoniae	M. pneumoniae
One unit of complement	HC_{50}
Optimal sensitising concentration	OSC
New York City Medium	NYC
Phosphate buffered saline	PBS
Potassium dihydrogen phosphate	KH_2PO_4
Radiolabelled iodine	I^{125}
Radioimmunoassay	RIA
Rheumatoid factor	RF
Ribonucleic acid	RNA
Sodium bicarbonate	$NaHCO_3$
Sodium Carbonate	Na_2CO_3
Sodium chloride	Nacl
Sodium hydroxide	NaOH
2-3-5 Triphenyl tetrazolium chloride	TTC
Zinc	Zn^{2+}
White blood cells	WBC

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INTRODUCTION AND AIM OF THE WORK

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Lung infections represent a considerable problem in the 1980s in terms of morbidity and mortality. They were responsible for 6 up to 24% of all causes of death in different populations (White et al., 1981 and Macfarlane et al., 1982).

Mycoplasmal pneumonia may reprsent 6% to 18% of all pneumonia cases in different society (White et al., 1981 and Andrews et al., 1987). It may be the main cause of pneumonia in certain endemic areas (K"onigswieser et al., 1982).

Clinically Mycoplasma pneumoniae (M. pneumoniae) infections may be mild in nature (Foy et al., 1979), however severe pulmonary involvement could occur in children and adults (Hanukoglu et al., 1986). Andrews et al., (1987) reported a high mortality rate of M. pneumoniae infections (5%) equal to that of pneumococcal pneumonia.

Extrapulmonary complications of mycoplasmal pneumonia are well known. These include, the central nervous system diseases, which are common and significant complications (Hodges et al., 1972), musculoskeletal disorders (Hernandez et al., 1977), pericardial and myocardial involvement (Pönkä et al., 1979b), mucocutaneous lesions (Murray et al., 1975) and may be acute glomerulonephritis (Cassell and Cole, 1981) and generalised lymphadenopathy (Shulman et al., 1972).