Pulmonary Capillary Changes and it & Relation to Nailfold Capillary Changes in Connectibe Tissue Miseuses

Thesis submitted for partial fulfillment of the MD Degree in Chest Diseases

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SSO

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Rist of Contents

	Page #
Introduction and Aim of the Work	1-3
Review of Literature	4-93
- Rheumatoid Arthritis	4-23
- Systemic Lupus Erythematosus	24-37
- Systemic Sclerosis	38-49
- Pulmonary Function Tests	50-66
- Capillary Microscopy	67-86
 Pulmonary Capillary Changes and it's Relation to Nailfold Capillary Changes in Connective Tissue Diseases 	87-93
Subjects and Methods	94-108
Results	109-141
Discussion	141-154
Summary and Conclusion	155-157
References	158-191
Arabic Summary	

Rist of Abbreviations

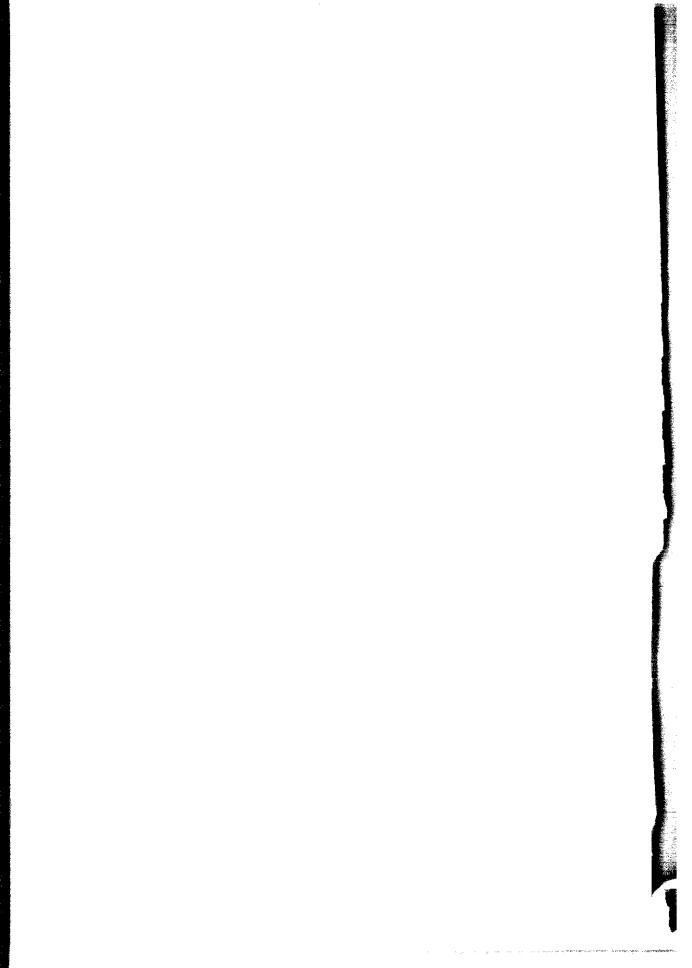
Name
Rheumatoid Arthritis
R.A.

Systemic Lupus Erythematosus
S.L.E.

Systemic Sclerosis
Progressive Systemic Sclerosis
P.S.S.

Pulmonary function tests
P.F.T.

Diffusing capacity of the lung for
carbon monoxide



Introduction and Aim of the Work



INTRODUCTION AND AIM OF THE WORK

any respiratory manifestations have been described in association with collagenosis. The resulting abnormalities of pulmonary function in affected patients include restrictive ventilatory defect, air flow obstruction, and a depressed diffusing capacity for carbon monoxide which may be an isolated early finding (Arroliga et al, 1992).

The collagen disorders share certain clinical characteristics, including inflammation of joints, serosal membranes, connective tissue and blood vessels in various organs. The lung is a particularly vulnerable target organ in the connective tissue group of diseases due to both its abundant vasculature and its large content of connective tissue, which is frequently involved in these diseases (Hunninghake et al, 1979).

There was correlation between nailfold capillary density and pulmonary gas transfer in patients with systemic lupus erythematosus, scleroderma and dermatomyositis (Monica Pallis et al, 1991).

Nailfold capillary microscopy is a non-invasive, invivo method of assessing skin microvasculature and its



value has been described in the differential diagnosis and prognosis of various connective tissue disorders and Raynaud's disease (Monica Pallis et al, 1991).

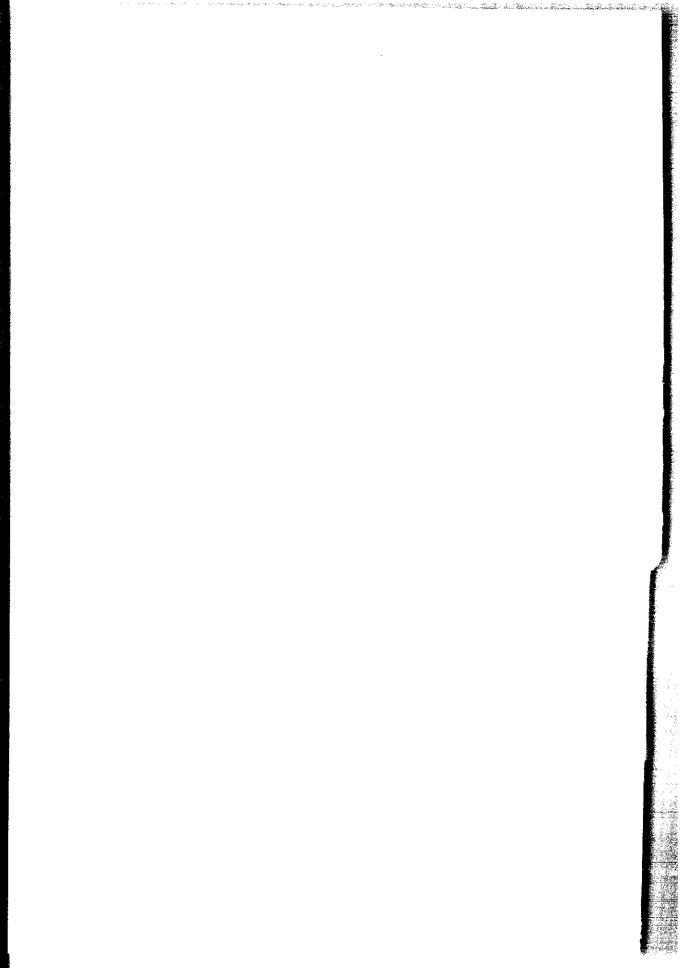
Poor gas transfer may be dependent on alveolar capillary loss and nailfold capillary density may be a good indicator of alveolar capillary density (Monica Pallis et al, 1991).

There is a relationship between capillary changes and organ involvement. Nailfold capillary changes is mirror for systemic vascular disease (Schmidt and Mensing, 1988).

Small airways disease and diffusion capacity impairment were the most frequent and marked functional abnormalities in the whole group of connective tissue disorder patients. Large airways obstruction was more prevalent in progressive systemic sclerosis, while diffusion capacity impairment in systemic lupus erythematosus and small airways disease in rheumatoid arthritis (Vitali et al, 1986).

AIM OF THE WORK

he aim of this work is to study the relationship ✓ between alveolo-capillary gas transfer (alveolar) nailfold capillary abnormalities in the diffusion) and patients with connective tissue diseases.



Review of Literature