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**CRYOGLOBULIN AND RHEUMATOID
ARTHRITIS**

THESIS



Submitted for partial fulfilment of
M.Sc. Degree in
INTERNAL MEDICINE

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«قالوا سبحانك لا علم لنا
إلا ما علمتنا انك انت
العليم الحكيم»

صدق الله العظيم

سورة البقرة - آية ٢٢

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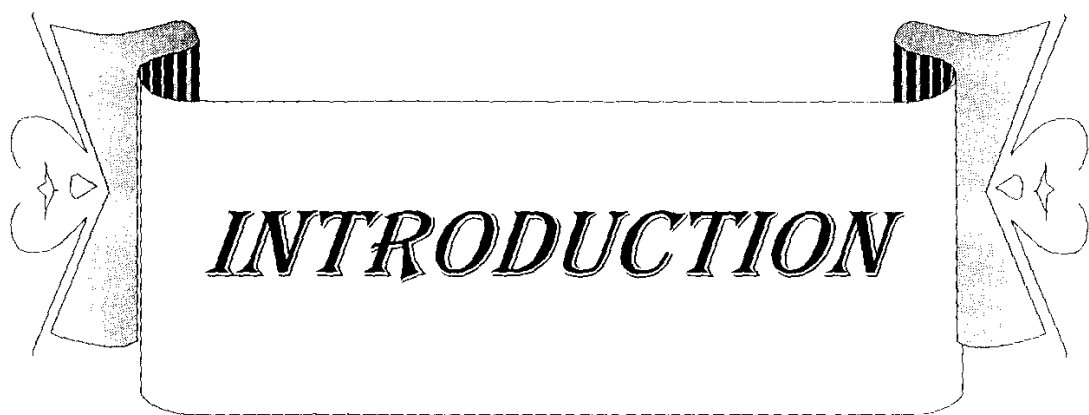
There are another persons to thank , my family

Dalia Omer kholussy, September, 1996

Ain Shams University

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A decorative banner with a central rectangular area containing the word "INTRODUCTION" in a bold, italicized, serif font. The banner is flanked by two stylized, symmetrical decorative elements that resemble folded fabric or ribbons, each featuring a small diamond-shaped motif. The entire banner is outlined with a dashed line.

INTRODUCTION

INTRODUCTION

Cryoglobulins are serum proteins with heterogeneous etiopathogenetic and immunochemical properties. They have in common, temperature dependent insolubility, in that at temperature below 37°C. they precipitate, and redissolve at 37°C.

The etiopathogenesis of the cryoglobulinemia may be unknown, whereas it is termed essential cryoglobulinemia, or it may appear in association with one of several diseases, whereas it is termed secondary cryoglobulinemia.

Cryoglobulinemia has indeed been found in patients with lymphoproliferative and autoimmune disorders, liver diseases, infectious (viral, bacterial, fungal and parasitic) diseases (Miller et al, 1991).

Rheumatoid Arthritis is a chronic systemic disease, primarily of the joint, marked by inflammatory changes in the synovial membranes and articular structures, widespread fibrinoid degeneration of the collagen fibres in

mesenchymal tissues, and by atrophy and refraction of bony structures.

Etiology is unknown but autoimmune mechanisms have been implicated (Manson, 1989).

Aim of the work:

The aim of this work is to study the relation between rheumatoid arthritis and cryoglobulin.

*REVIEW OF
LITERATURE*

