Role of Antigastric Parietal Cell Antibodies
And Vitamin B12 In Rheumatoid Disease

# THESIS

Submitted in partial fulfilment of the requirement for master degree in physical medicine

## BY

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AIN SHAMS UNIVERSITY
1996



# Acknowledgment

I would like to express my deepest gratitude to Prof. Dr. Mohammed Gamal Zaki, Prof. of physical medicine, Ain Shams University. A great teacher and a research scientist. He was kind enough to spend much of his valuable time in revising, modeling and adding to this text.

No words could satisfy my feeling of sincerity, loyalty and ever lasting gratitude.

Also I would like to thank **Dr. Noura Haroon**, Assistant Prof. of physical medicine, Ain Shams University, for her effort, constant encouragement and keen interest in the progress and accomplishment of this work.

Also I would like to thank **Dr. Nadia Kamel**, Assistant Prof. of physical medicine, Ain Shams University, for her generous help, sympathetic support and valuable supervision

Finally, I find great pleasure in expressing my gratitude towards all those who sincerely participated in completing this work.



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# INTRODUCTION AND AIM OF THE WORK

### Introduction

Rheumatoid arthritis is a systemic inflammatory disorder of unknown etiology that affects articular as well as extra articular structures. The disease is characterized by remissions and exacerbations and the disease process usually continues for long time with significant morbidity and disability.

Many types of anemias are associated with active rheumatoid arthritis [ Mowat 1971].

Vitamin B<sub>12</sub> and folic acid deficiency are reported to be more prevalent among patients with rheumatoid disease.

The prevalence of iron deficiency anemia is up to 50 to 70 %.

Many patients with active rheumatoid arthritis present with anemia of chronic disease, this anemia of chronic disease may be a feature of rheumatoid arthritis and not a complication. It may be that factors leading to anemia of chronic disease directly participate in rheumatoid disease pathogenesis [ Hansen etal., 1983].

Anemia may complicate the use of anti-rheumatic drugs as non steroidal anti-inflammatory drugs like indomethacin which causes bone marrow depression and Aspirin causes gastric erosions [Birgegard etal., 1987].

So in patients with rheumatoid disease different causes of anemia are present making studies on diagnosis and pathogenesis difficult to interpret with subsequent difficulty in management. Gastric parietal cell antibodies are circulating antibodies to intercellular antigens of gastric parietal cells.

Antibodies to intrinsic factor (Type 1), and antibodies to intrinsic factor  $B_{12}$  complex (Type 11) are all a common feature of pernicious anaemia. Employing an indirect immunofluorescence assay, antibodies to gastric parietal cells are detected in more than 95% of patients with pernicious anaemia. Antigastric parietal cell antibodies are also found in 60% of atrophic gastric and 22% of gastric ulceration cases without detectable anaemia because these conditions occur well before the onset of pernicious anaemia [Withingham and Mackay 1985]

The occurance of antigastric parietal cell antibodies often arises in the presence of some autoimmune diseases as rheumatoid disease.

The incidence of antigastric parietal cell antibodies rises with age and is more common in women than men [Bigazzi etal., 1986]

Since it is known that there are different types of anemias with rheumatoid arthritis including  $B_{12}$  deficiency anaemia. This might raise a question about the existence of antigastric parietal cell antibodies in theumatoid disease and its relation to vitamin  $B_{12}$ .

# Aim of The Work

The aim of this work is to investigate the presence of antigastric parietal cell antibodies and its relation to vitamin  $B_{12}$  and their role in the pathogenesis of theumatoid disease activity and features.



# REVIEW OF LITERATURE