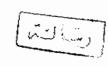
TUMOR NECROSIS FACTOR "ALPHA" IN CHILDREN WITH **B-THALASSEMIA**



THESIS

Submitted for Partial Fulfilment of Master Degree in Paediatrics

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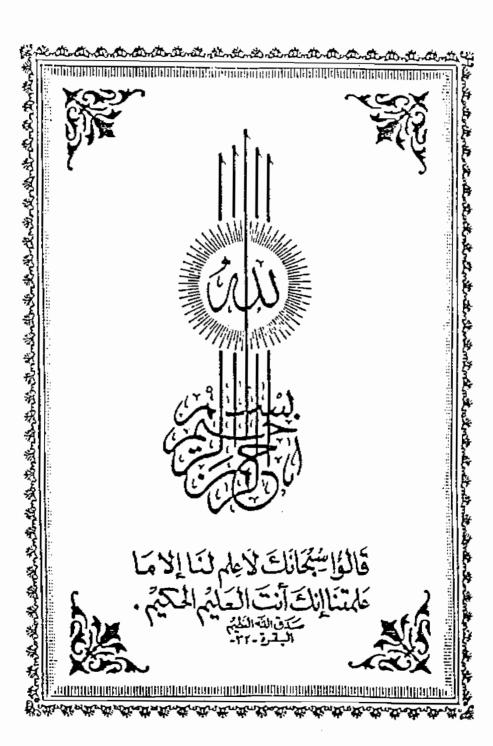
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LIST OF ABBREVIATIONS

ACD: Anemia of chronic disease.

BFU-Es: Erythroid burst forming units.

CSF: Colony stimulating factor.

DF: Desferroxamine.

FSH: Follicular stimulating hormone.

GVHD: Graft versus host disease.

Hb: Hemoglobin.

HbF: Fetal hemoglobin.

HLA: Histocompatibility complex antigen.

ICAM: Intrinsic cell adhesion molecule.

IL: Interleukin.

INF: Interferon.

kD: Kilodalton.

LDH: Lactate dehydrogenase.

LH: Leutinising hormone.

LPL: Lipopolylipases.

LPS: Lipopolysaccharides.

m-RNA: Messenger ribonucleic acid.

RA: Rheumatoid arthritis.

SGOT: Serum glutamic oxalo-acetic transaminase.

SGPT: Serum glutamic pyruvic transaminase.

Subcut: Subcutaneous.

r-TNF = recombinant tumor necrosis factor

T₃: Thyroxin hormone-active form.

 \mathbf{T}_4 : Thyroxin hormone-inactive form.

TNF-α: Tumor necrosis factor alpha.

TNF-B: Tumor necrosis factor beta.

Vit.: Vitamin.

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INTRODUCTION

TUMOR NECROSIS FACTOR (alpha) IN CHILDREN WITH 8 THALASSEMIA

INTRODUCTION

ß-thalassemia was first reported in Egypt by Diwani (1944), (Diwani, 1944). It is the most common chronic hemolytic anaemia in Egypt. The incidence of the heterozygous form in normal Egyptian population is about 1.3% (Sabry, 1973).

Tumor necrosis factor alpha (TNF- α) is a peptide mediator belonging to the group of cytokines. It is produced by activated macrophages and other cells. It has a broad spectrum of biological actions on immune and non-immune target cells (Oppenheim et al., 1991).

Recent reports demonstrated increased incidence of high serum level of TNF (α) in β -thalassemia patients. Further studies are required to assess the significance of this finding (Melicoli et al., 1992).

AIM OF THE WORK

AIM OF THE WORK

The aim of the present work is to study the serum level of tumor necrosis factor (alpha) in children with β -thalassemia and to assess its prognostic significance.

REVIEW OF LITERATURE