سامية محمد مصطفى

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

سامية محمد مصطفى

شبكة المعلومات الجامعية

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التوثيق الالكتروني والميكروفيلم

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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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بعض الوثائق الأصلية تالفة

سامية محمد مصطفى

بالرسالة صفحات لم ترد بالأصل

SOME IMMUNOLOGICAL STUDIES IN NEONATAL SEPSIS

THESIS

Submitted for Partial Fulfillment of MD Degree in Pediatrics

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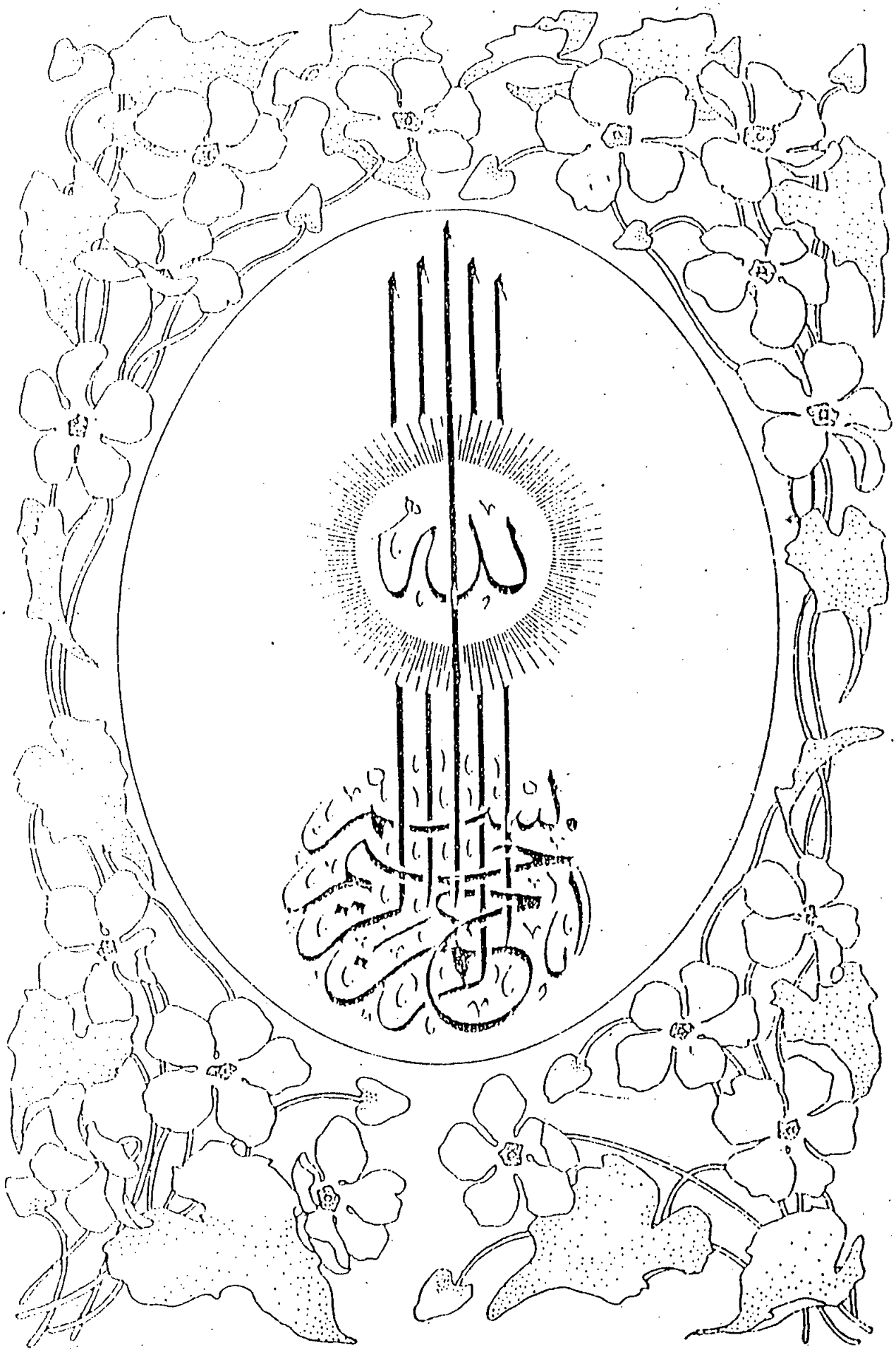

TO

MY PARENTS,

WIFE AND SON AHMED

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ACKNOWLEDGMENT

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Walid Abdel Wahab

CONTENTS

INTRODUCTION

INTRODCTION

Sepsis is a major cause of morbidity and mortality during the neonatal period in spite of the use of potent antibiotics and intensive supportive care (kaplan, 1987; Zimmerman and Dietrich, 1989). The incidence ranges from 1-10 cases per 1000 live births (Klein and Marcy, 1983).

An immature immune system predisposes newborns, especially premature infants to fulminant bacterial sepsis (Quie PG, 1990). A lower opsonization potential due to decreased function of compliment (Zach and Hostetter, 1989), decreased interferon-gamma (IFN-γ) production by T lymphocytes (Wilson et al., 1986) and deficient immunoglobulin production by B lymphocytes (Splawski et al., 1991) contributes to this relative immune deficiency (Klein and Marcy, 1983).

Bacteremia and septic shock are associated with the release of endotoxins into the circulation (Van Deventer et al., 1988). Macrophages and other reticuloendothelial cells stimulated by microorganisms or endotoxins elaborate a variety of biologically active mediators known as cytokines (Kremer et al., 1996; Jurges and Henderson, 1996). Cytokines, in turn, may induce many of the

responses associated with sepsis and septic shock (Bakwell and Christman, 1996). Several cytokines seem to play a major role in the initiation of sepsis. TNF-α and IL-1β are the first two cytokines involved in its pathogenesis (Tracy et al., 1988). IL-8, which is one of the most powerful chemoattractive agents for neutrophil (Damas et al., 1989), is found in the blood stream together with IL-6 after the peak of TNF-α and IL-1β concentrations are reached in animal or human endotoxemia models (Van Zee et al., 1991). IFN-γ plays a primordial role in defense against intracellular bacteria and parasites. TNF-α induces the production of IFN-γ in neonatal sepsis (Jurges and Henderson, 1996). IFN-γ was found to enhance the chemotactic response of neonatal polymorphonuclear leukocytes (Hack et al., 1997).

Aim of the study

The aim of this study was to estimate TNF-α, IL-8 and IFN-γ serum levels as well as their values in diagnosing neonatal sepsis.

REVIEW OF LITERATURE