CEREBROSPINAL FLUID CONCENTRATION OF INTERLEUKIN-6 IN MENINGITIS

THESIS
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By
John Gad El Rab Salama
M.B.B.Ch.

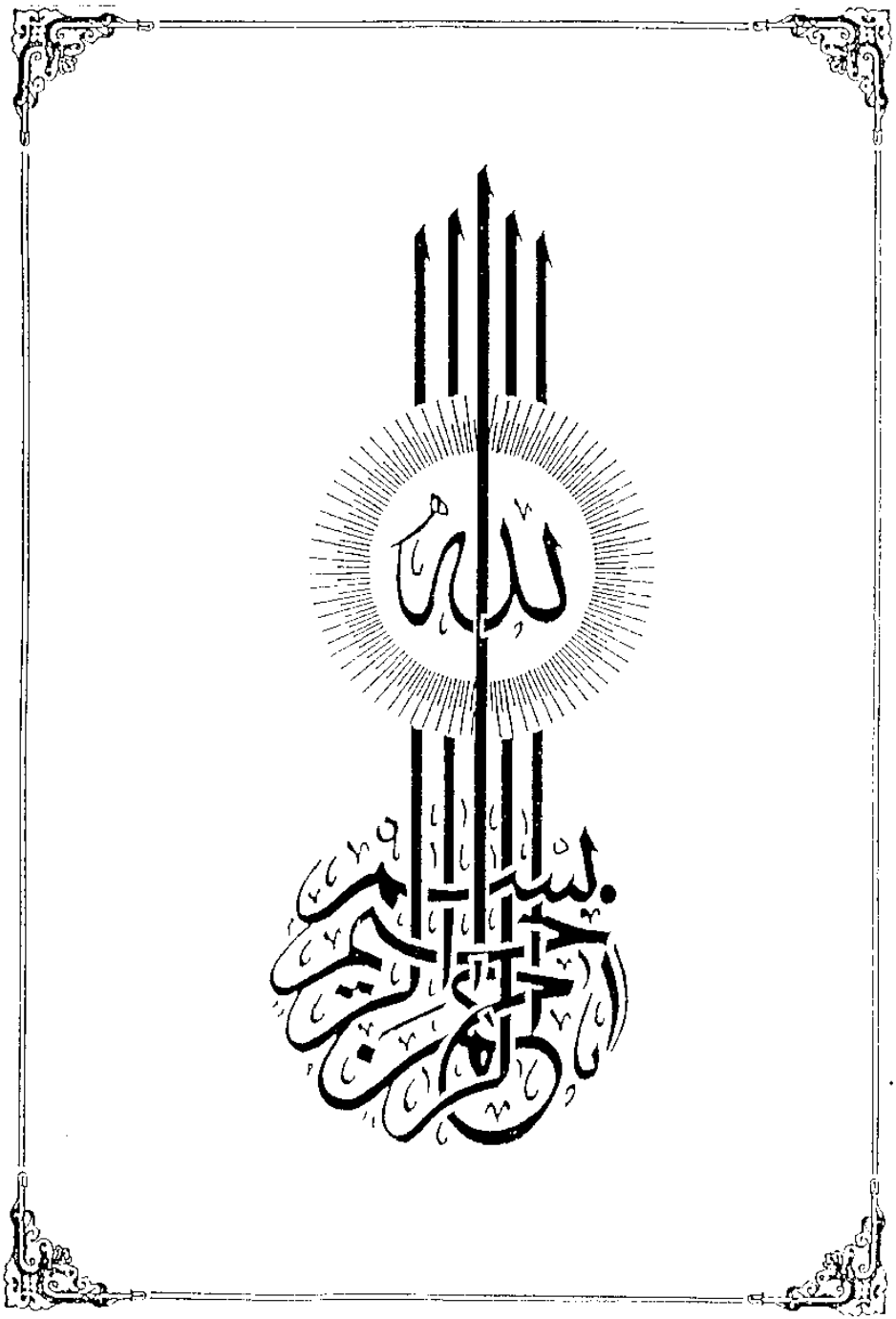
SUPERVISED BY

Ass. Prof. Dr. Ismail Sadek Ismail
Ass. Prof. of Pediatrics
Faculty of Medicine - Ain Shams University

Ass. Prof. Dr. Hisham Awad Abdel Samie Awad
Ass. Prof. of Pediatrics
Faculty of Medicine - Ain Shams University

Ass. Prof. Dr. Aisha Yassin Abdel Ghaffar
Ass. Prof. of Clinical Pathology
Faculty of Medicine - Ain Shams University

Faculty of Medicine
Ain Shams University
1996



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Introduction:

Cytokines which are proteins secreted by macrophages and T-lymphocytes are powerful mediators in inflammatory response. They act not only as essential soluble cofactors in immunological responses, but are also responsible for inducing fever and the acute phase response *(Dinarello et al., 1984)*.

Cytokines are assuming increasing clinical importance in understanding the pathogenesis and management of several infectious diseases, their continued study will bring new uses of this exciting group of molecules in the control of diseases *(Powrie and Coffman, 1993)*.

Meningitis is an inflammation of membranes surrounding the brain and spinal cord. A very wide range of microorganisms varying in complexity from virus to bacteria have found in patients with meningitis, whether septic or aseptic *(Cherry, 1981)*.

Sensitive immunoassays have shown appreciable concentrations of these cytokines in serum/plasma or effusions from the patients with some reactive or neoplastic disorders *(Dinarello, 1991)*.

Recent reports indicate that interleukin-6 (IL-6) might be increased in cerebrospinal fluid of patients with meningitis, however, their clinical and biological roles are not fully elucidated *(Rusconi et al., 1991)*.

Aim of the Work:

The aim of this study is to evaluate interleukin-6 in cerebrospinal fluid in cases of meningitis, correlating its concentration with severity of the disease and clinical outcome in cases of septic versus aseptic meningitis.