شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

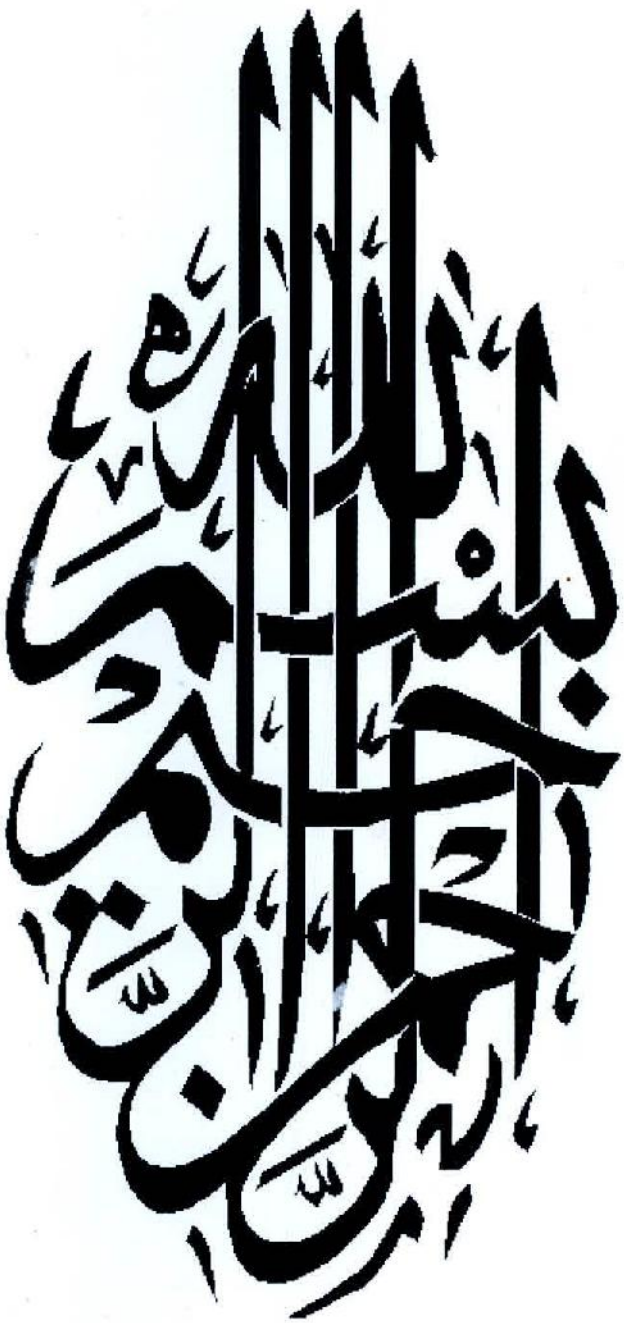
نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

بعض الوثائق الأصلية تالفة

بالرسالة صفحات لم ترد بالأصل


بسم الله الرحمن الرحيم

Interleukin –1 (IL-1) level in adult periodontitis patients under stressful life events

Thesis

Submitted to the Faculty of Dentistry,
Alexandria University

in partial fulfillment of the requirements of the

Master Degree in Oral Medicine, Periodontology, Oral diagnosis and Radiology

By
Hanaa Mohamed Shehata El Samny
B.DS. Alexandria University

Faculty of dentistry
Alexandria University
2000

Supervisors

Prof. Dr. **Ahmed Mohammed Zaky El Ashmawy**
Professor of Oral Medicine, Periodontology,
Oral Diagnosis and Radiology,
Faculty of Dentistry
Alexandria University

Prof. Dr. **Seham Hassan Rashed**
Professor of Psychiatry
Faculty of Medicine
Alexandria University

Dr. **Ghada Mohamed Anwar Mansour**
Lecturer of Oral Medicine, Periodontology,
Oral diagnosis and Radiology.
Faculty of Dentistry
Alexandria University

Dr. **Wessam Mohamed El Gendy**
Assistant Professor of Clinical Pathology,
Faculty of Medicine
Alexandria University

Dedicated to

All those who have taught me through my life from birth to the present time starting with my parents, my brothers, my sister, my teachers at all stages of education, and ending with every one who will add a letter to my knowledge.

Contents

List of Tables

List of Figures

Introduction

Introduction

Epidemiological studies from many parts of the world indicate that only a subpopulation of between 7% and 15% of the dentate adult population are significantly affected by destructive periodontal disease [1].

The factors regulating susceptibility to periodontal disease are still unclear, but include genetic variation between individuals in terms of their immune responses to periodontopathic bacteria. In addition, there are imbalances in the immune system caused by environmental factors such as mental stress leading to breakdown in the equilibrium, which is present between tissue destruction and repair, thereby resulting in tissue damage [2].

Stress can be best understood as part of a complex and dynamic system of transaction between individuals and their environment. Stress is part of the human condition, which is universally present, but to varying degrees and with different effects on individual [3]. Stress is compatible with good health being necessary to cope with the challenges of every day life. Problems start when the stress response is inappropriate to the size of the challenge [4].

These emotional responses to stresses produce well-characterized biochemical changes in experimental animals. The physiological consequences of these stress-mediated changes have been shown to have significant adverse effects on the proper functioning of the immune system [4,5].

Mental, physical and biological stress impact on the body's ability to resist disease and a relationship has been demonstrated between stress and a number of diseases including coronary heart disease and breast cancer [6]. It has also been reported that periodontal disease is more widespread and severe in those with higher levels of stress [7].

During chronic inflammatory periodontal diseases, inflammatory cells produce a variety of cytokines as IL-1 [8], a key mediator of various immunological and inflammatory phenomena [9]. It is one of the factors known to stimulate bone resorption and secretion of proteinases and may be involved in the attachment loss and bone resorption, which are characteristic features of periodontitis [10]. Moreover, IL – 1 has systemic as well as local effects on immunocompetent cells and others, which are involved in the inflammatory reaction [11].

The immune system has been reported to be involved in the stress reaction. IL-1β, one of the immune variables, has been investigated, and studies revealed conflicting results concerning its reaction with stress [12,13].

However, little has been done to assess the mechanism by which psychosocial stresses influence periodontal disease initiation and progression.