بسم الله الرحمن الرحيم

EVALUATION OF THE PRIMARY STABILITY OF DELAYED IMPLANT PLACEMENT IN RELATION TO HISTOLOGIC AND RADIOGRAPHIC BONE DENSITY IN MANDIBULAR POSTERIOR AREA.

(A qualitative research study)

Thesis Submitted to
The faculty of oral and dental medicine
Cairo University
In partial fulfillment of the requirements for the
Master Degree in Oral and Maxillofacial Surgery

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2010

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2016

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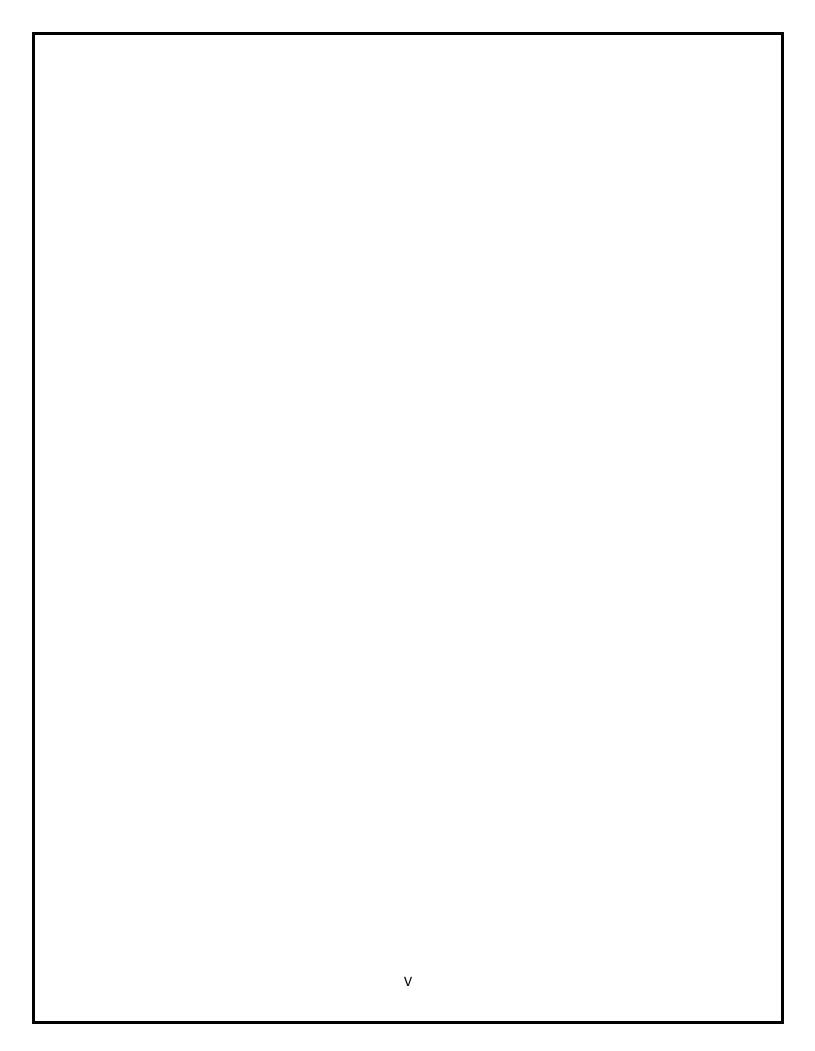كلية طب الفم و الاسنان

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Acknowledgment

First and foremost, thanks to **Allah**.

I wish to conduct my gratitude, plentiful thanks and deep appreciation to *Dr. Nieven Askaar*, Assistant professor of Oral and Maxillofacial Surgery, Faculty of Oral and Dental Medicine, Cairo University, for her precious advice, critical help, wise opinion, infinite support and meticulous assistance that lead to realization of this thesis. It is of great honor to work under her supervision.
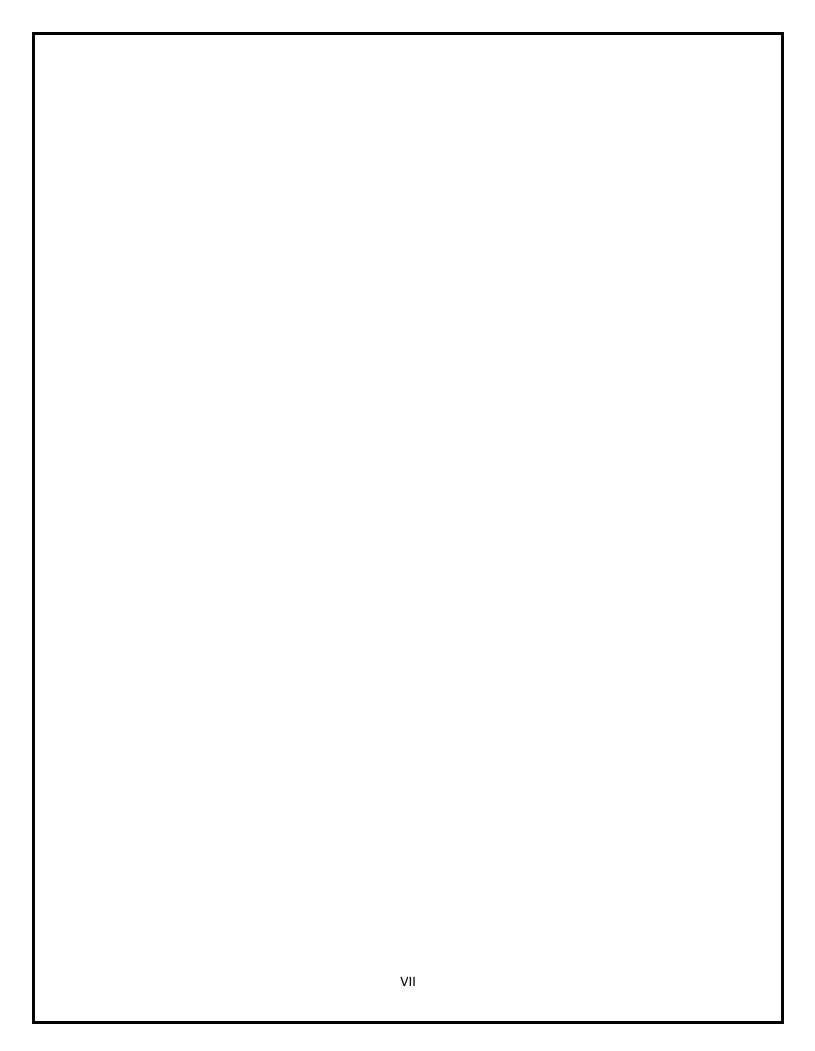
Words can't adequately express the deepest feeling of gratitude and genuine appreciation to *Dr. Tarek El-Faramaoy*, Lecturer of Oral and Maxillofacial Surgery, Faculty of Oral and Dental Medicine, Cairo University, for his limitless efforts, and time he spent in guidance all through this work to direct my steps. I owe him much more than gratitude and appreciation.

My deepest thanks to my parents, my brothers, my friends , and my mentor Dr. Moustafa Abdel-Hady for their love, care, encouragement, and everlasting help throughout my life.

CONTENTS

LIST OF ABBREVIATIONS

RF   Resonance Frequency

RFA   Resonance Frequency Analysis

ISQ   Implant Stability Quotient

CT   Computered Tomography

CBCT   Cone Beam Computed Tomography

CRA   Cutting Resistance Analysis

RTT   Reverse Torque Test

BIC   Bone Implant Contact

RTV   Removal Torque Value

DMC   Dental Mobility Checker

FFT   Fast Fourier Transform

POWF   Pulsed Oscillation Waveform

AED   Acousto Electric Driver

AER   Acousto Electric Receiver

PTV   Periotest Value

PDL   Periodontal Ligament

SLA   Sandblasting and Acid etching

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INTRODUCTION

INTRODUCTION

The goal of modern dentistry is to restore the patient to normal contour, function, comfort, esthetics, speech, and health, whether by removing caries from a tooth or replacing several teeth. What makes implant dentistry unique is the ability to achieve this goal, regardless of the atrophy, disease, or injury of the stomatognathic system. The more missing teeth, the more challenging this task becomes. As a result of continued research, diagnostic tools, treatment planning, implant design, materials and techniques; predictable success is now a reality for rehabilitation of many challenging clinical situations. [1]

Bone is an organ that is able to change in relation to a number of factors including hormones, vitamins, and mechanical influences. However biomechanical parameters such as duration of edentulous state are predominant. Every change in the form and function of bone or of its function alone is followed by certain definite changes in the internal architecture, and equally definite alteration in its external conformation in accordance with mathematical laws. [2]

The implant stability, indirect indication of osseointegration, is a measure of clinical immobility of implants. Adequate stability of an implant in the surrounding bone is essential to allow undisturbed healing and bone formation to occur following placement and also to permit optimal stress distribution from