

## Effect of mini-implant retained versus tooth supported overdenture on electromyographic activity of masseter and temporalis muscles

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## By Lamiaa Farouk Zaki Mohammed

B.D.S, 2009 Ain Shams University

Faculty of Dentistry Ain Shams University 2014

### **Under the Supervision of**

### Prof. Dr. Hany Ibrahim Eid

Professor of Removable Prosthodontics Faculty of Dentistry, Ain Shams University

### Dr. Noha Helmy Nawar

Lecturer of Removable Prosthodontics
Faculty of Dentistry, Ain Shams University

### بسم الله الرحمن الرحيم

{وقالوا سبحانك لا علم لنا إلا ما علمتنا انك أنت العليم الحكيم}

صدق الله العظيم

سورة البقرة {٣٢}

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# مقارنة تأثير الأطقم السفلية المحمولة على غرسات سنية صغيرة القطر والأطقم المحمولة على أسنان داعمة على النشاط العضلي الكهربي للعضلة الصدغية والماضغة

رسالة مقدمة الى قسم الاستعاضة الصناعية بكلية طب الاسنان – جامعة عين شمس كجزء من مقومات الحصول على درجة الماجستير فى الاستعاضة الصناعية للفم والوجه والفكين

مقدمة من لمياء فاروق زكى محمد بكالوريوس طب الاسنان- جامعة عين شمس ٢٠٠٩

كلية طب الاسنان جامعة عين شمس

### تحت اشراف

ا.د /هانی إبراهیم عید

استاذ بقسم الاستعاضة الصناعية بكلية طب الاسنان جامعة عين شمس

د/نهی حلمی نوار

مدرس بقسم الاستعاضة الصناعية بكلية طب الاسنان جامعة عين شمس

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#### INTRODUCTION

Loss of natural dentition, eventual edentulism and resultant wearing of complete denture have been part of the expected course of aging. This condition has posed a challenge to prosthodontists and oral surgeons, encouraging them to establish acceptable prosthetic results for patients. Although the patient may adapt well to the complete denture, the decrease in masticatory function, in comparison with natural dentition has been well documented. Years of wearing complete denture lead to progressive bone resorption. This destructive process decreases surface area necessary for denture support and hence eliminates favorable anatomy for retention, and result in unfavorable denture bearing area. With introduction of over-denture, the problems of complete denture were nearly solved.

The concept of overdentures developed as a simple and economic alternative to complete dentures when the dentition is compromised. The consequences of edentulism are hazardous and range from inability to chew efficiently to bone resorption.

Overdentures have many advantages including preservation of alveolar bone and proprioception which are functions of the periodontal ligament. They salvage the patient from the psychological trauma of finding himself edentulous. Moreover, they enhance support, stability and retention. Attachments are one