



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم



شبكة المعلومات الجامعية التوثيق الإلكتروني والميكرو فيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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**“Effect Of Cantilever In Case Of Bio HPP Telescopic
Implant Retained Over Denture Vs Bio HPP Hybrid Prosthesis”**

Thesis submitted to Removable Prosthodontics Department,
Faculty of Dentistry, Ain Shams University,
For the partial fulfillment of the Master Degree, In Oral and
Maxillofacial Prosthodontics

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(2010)

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2021

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Dedicated TO....

To

Allah, the ever-thankful, for his help and bless.

To

My father and my mother who supported me to
complete this thesis.

To

My beloved wife and my two little angels who are always
the reason behind my motivation.

Deepest thanks go to all my beloved friends for their
endless Love and support.

ACKNOWLEDGEMENT

I would like to express my sincere gratitude and grateful appreciation to **DR. Rami Maher Ghali**, Professor of Prosthodontics, and Vice Dean of Community service and Environmental Development, Faculty of Dentistry, Ain Shams University, *who kindly and generously gave much of his effort, time, extreme patience, valuable guidance and precious experience and that will always be remembered. Words stand short when expressing my gratefulness for his valuable guidance and instructions from the beginning and throughout the whole work.*

I will remain grateful to him, he did not save any effort and time in teaching, advising and encouraging, enabling me to finish this work correctly.

*I am extremely grateful to **Dr. Heba Allah Tarek**, Assistant Professor of Prosthodontics, Faculty of Dentistry, Ain Shams University, for her support and help to bring out this piece of work and from whom I learnt a lot of patience and accuracy.*

I would also like to thank all staff and colleagues in the department who helped me throughout my work where we shared science and knowledge.

Special thanks to **Dr. Moahmed Sherif** and **Dr. Ahmed Megahed** for great effort and help during the laboratory part of this study.

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Introduction

Edentulous patients in one or another sense are living a life with too much of physical, emotional and psychological burden. Various causes of this include decreased chewing efficiency, decreased esthetic look resulting in poor health, decreased self-confidence of the patient. Edentulism can be a result of poor oral hygiene, negligence towards dental health or heavily restored failing dentition. Increasing number of population possesses a terminal dentition and ability to re-treat is restricted due to poor bone support and reduced bone volume.

The ability of denture wearers to break down test food is very poor when compared with that of persons with natural dentitions. Complete denture wearers needed on average four times, six times, and even eight times the chewing strokes number of dentate persons to achieve the same degree of pulverization.

Biting forces of edentulous subjects obtained with maximum clenching (unilateral) ranges from 77 to 135 N, in comparison with the average maximum bite force (unilaterally measured) for dentate persons varies from 306 to 847 N, which means that the masticatory performance of individuals who wear complete dentures is less than 20% of the performance of persons with a natural dentition.

The maximum bite forces of denture wearers may be even lower than the forces needed to chew natural foods. Thus, denture wearers might have difficulties in biting and incising such foods. Therefore,

full denture wearers select only a few food particles at a time, so the total force needed to penetrate the food is limited.

Prosthetic rehabilitation of completely edentulous patients with implants is a well-established and reliable mode of treatment. Availability of good quality and quantity of bone for implant placement is very important aspect. Patients with severe resorption of alveolar bone require prior surgical intervention in the form of bone augmentation and sinus lift procedures for its successful outcome.

Traditionally, it is well established that the masticatory forces must be directed along the long axis of the tooth or implant which increases the longevity and reduces the amount of bone resorption. Due to lesser amount of bone available in severely resorbed alveolar ridges, researchers have been trying to find a suitable alternative to bone augmentation and sinus lift procedures so that additional surgical procedures could be avoided.

No denture material has yet been invented which fully satisfies the ideal criteria for denture base. Since its introduction in 1937, poly (methyl methacrylate (PMMA)) has become the most commonly used material for denture bases. It remains most popular of all the polymeric denture base materials. This is largely due to its favorable, although not ideal, characteristics.

PMMA is far from a perfect denture base material. It exhibits volumetric shrinkage during polymerization that leads to dimensional changes in the denture base produced from the primary wax pattern. Further distortion and inaccuracies are introduced due to the high