



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكرو فيلم

# بسم الله الرحمن الرحيم



**MONA MAGHRABY**



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# شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

### قسم

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علي هذه الأقراص المدمجة قد أعدت دون أية تغييرات



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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



**MONA MAGHRABY**



# **Bio-HPP versus Co-Cr, CAD/CAM designed Telescopic retained Removable Partial Dentures (In vitro study)**

***Thesis***

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By

**Mohammed Abdel Rahman M. Muwafi**

B.D.S., Ain Shams University, (2011)

M.Sc. Ain Shams University, (2017)

**Faculty of Dentistry  
Ain Shams University  
2020**

## ***SUPERVISORS***

### **Prof. Dr. Mahmoud Hassan El-Afandy**

Professor of Oral & Maxillofacial Prosthodontics

Faculty of Dentistry

Ain-Shams University

### **Dr. Yasmine Galal El-Din Thabet**

Associate Professor of Oral & Maxillofacial Prosthodontics

Faculty of Dentistry



Ain-Shams University



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وَقُلْ نَزَّلْنِي عَلَمَا

صَدَقَ اللَّهُ الْعَظِيمُ



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## **INTRODUCTION**

During the past years, economic growth, coupled with a strong desire among people to maintain a healthy lifestyle, have impacted all fields of medicine. Recently, patients tend to be less tolerant with the idea of teeth extraction, which was thought to render the science of removable prosthodontics obsolete. However, the advances in healthcare services gave the people a more extended lifespan, which lead to an increase in the practice of geriatric dentistry, including removable prosthesis. Unfortunately, such improvements have not yet influenced some of the less fortunate developing countries.

Kennedy's class III is the most frequently encountered pattern of partial edentulism in the upper arch. Since the fixed prosthodontic service was not free of charge, the removable partial denture (RPD) continues to be an essential prosthetic consideration in many oral reconstructions.

The main function of the RPDs is to preserve the integrity of the dental arch and to restore the lost function, thus they must not produce unfavorable forces on the abutments or the supporting structures.

Accuracy and adaptation of a prosthesis play an important role in preventing undue forces on the abutments. A properly adapted and accurately manufactured partial denture decreases the harmful forces on the abutments and maintains their health. Multiple steps in the conventional fabrication technique affected the accuracy and adaptation of RPDs, so Computer Assisted Design and Computer Assisted Manufacturing (CAD/CAM) technology was used.

Unlike the conventional fabrication methods, computer aided manufacturing has the advantages of omitting multiple error introducing steps such as impressions, waxing and casting. This is assumed to reduce the sources