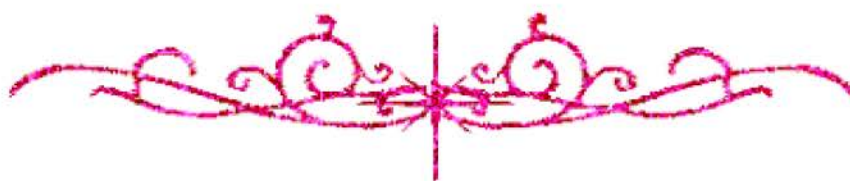


سامية محمد مصطفى



شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



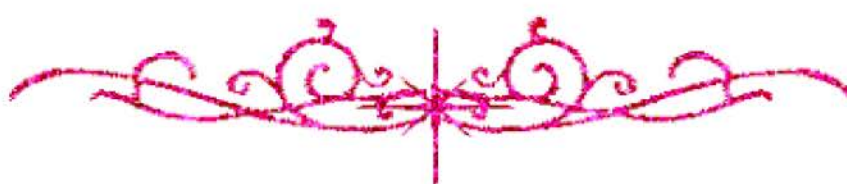
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شبكة المعلومات الجامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



سامية محمد مصطفى



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

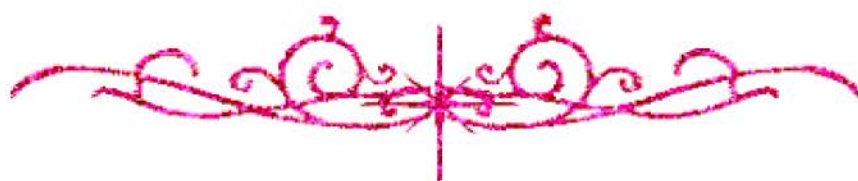
قسم

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



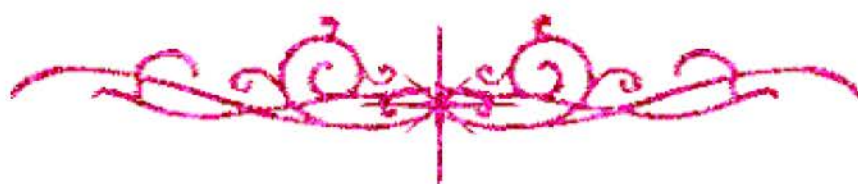
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بعض الوثائق الأصلية تالفة



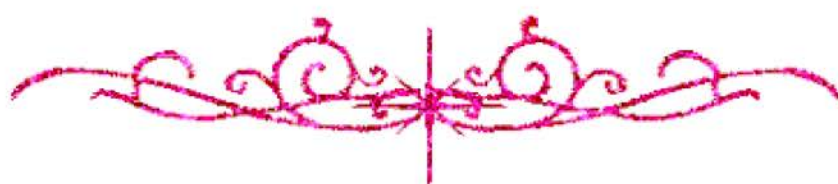
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بالرسالة صفحات لم ترد بالأصل



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

B
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Clinical evaluation of screw-vent implant versus IMZ implant in natural tooth-implant fixed restorations

Thesis submitted in Partial Fulfillment
of the Requirements for
the Doctor Degree of Philosophy
In
Oral Surgery

By
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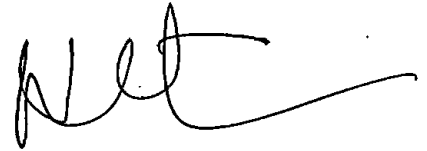
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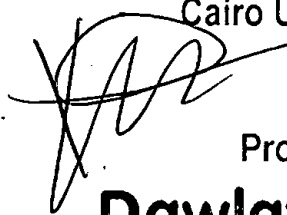
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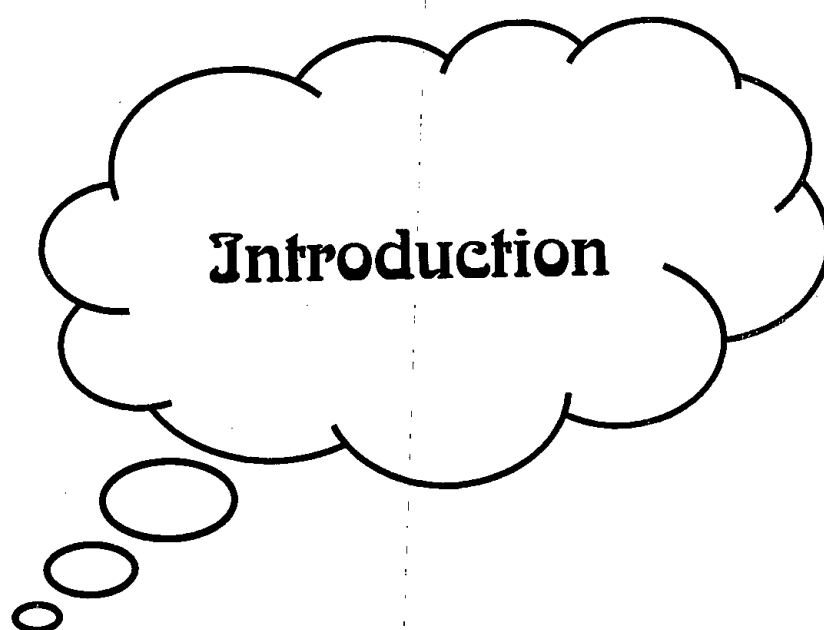
A major part of appreciation is extended to my parents, my wife, my son, my daughters, my brothers and my sister for their sacrifices, love and encouragement.

List of abbreviations

IMZ	Intra-Mobile cylindrical implant system
PDL	Periodontal ligament
TPS	Titanium Plasma spray implant system
ISIS	Ismail Implant System
CK	Complaint Keeper Implant System
SES	Stree Eliminating Space
IME	Intra-Mobile Element
IMC	Intra-Mobile Connector
GCF	Gingival Crevicular Fluid
GAGs	Glycose-AminoGlycans
HA	Hyaluronic Acid
CS	Chondroitin Sulphate
KS	Keratine Sulphate
DS	Dermatine Sulphate
C4S	Chondroitin 4 Sulphate
Hx 1.25	Hextool (diameter 1.25 mm)
MI	Mobility index
PD	Probing Depth
GI	Gingival Index
BI	Bleeding Index
RI	Radiographic Index
SD	Standard deviation
BL	Base Line

Contents

Introduction	I
Review of literatures	2
Aim of the study	62
Materials and methods	63
Results	126
Discussion	191
Summary and conclusion	204
References	207



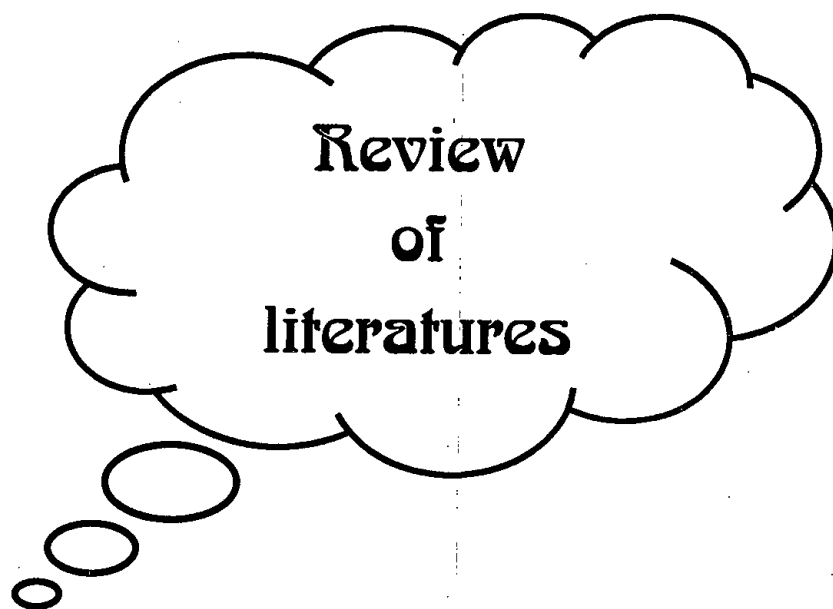
Introduction

The magnitude of the missing tooth problem (edentulism) in the adult population remains considerable. Many individuals with edentulism can be treated with partial or complete traditional removable dentures or fixed bridges. But the loss of the tooth bearing of the bone make these restorations not satisfactory for many patients.

Now the use of dental implants to provide support for replacement of missing teeth is becoming an important components of modern dentistry and many individuals could conceivably benefit from dental implant therapy. Moreover there is a strong suggestion that a substantial number of patients prefer implant-supported prosthesis over soft tissue supported prosthesis.

The difference in mobility between the implants and the natural teeth due to the periodontal ligament, discouraged many clinicians to connect implants to natural teeth, while forced others to try to imitate the action of the periodontal ligament through the use of stress absorbing elements in the implants to compensate for this difference.

According to this concept this study connect two different implant systems with natural tooth abutment. The screw-vent implants system which has no absorbing element, and the IMZ implant system with stress absorbing element the intramobile element (IME).



Review of Literature

Posterior partially edentulous patients have a very complicated problem that cannot be easily solved. Conventional removable partial dentures can treat the posterior edentulous cases but these prosthesis are not satisfactory for significant number of individuals who have lost the tooth-bearing portions of the bone and simply cannot manage removable prosthesis¹.

The posterior partial prosthesis are supported by the residual ridge and the most distal abutment tooth. Changes of the prosthesis support, especially in the mandible may compromise denture wearing and masticatory function².

The amount of bone reduction is generally greater in the mandible, which implies that the mandibular denture usually poses greater clinical problems for the patient and the prosthodontist³.

The two structures that support a mandibular distal-extension removable partial denture differ markedly in their viscoelastic response to loading. The differential between the 500 μm resilience of the residual ridge tissues and the 20 μm of the teeth permitted by the periodontal ligament present a disparity of support. Hence the denture tends to rotate about its most distal abutments, inducing heavy torsional stresses on, and possible traumatization of the ridges⁴.

Distal extension cantilever fixed partial denture can be used to replace missing teeth in the posterior mandible. The use of the tooth-supported cantilevers should be avoided in posterior regions because of the magnitude and direction of occlusal forces that are placed on associated