



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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جامعة عين شمس

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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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Introduction

The coronal tooth structure can be compromised by multifactorial causative agents; defective restorations, large carious lesions, severe attrition, erosion or even wear and occlusal trauma. In these cases, endodontic treatment proposes the ultimate solution to remove the infected tissue and microorganisms to control the pain and radicular inflammatory response in the root canal system.

For long time dentists restored endodontically treated teeth by placing post, core with subsequent placement of full coverage crowns. However, they have some disadvantages, such as fracture of roots, corrosion and even loss of post retention. It requires removal of a large amount of root dentin for preparation for post placement particularly for cast post and cores. An alternative solution was proposed to use a glass fiber post system.

Glass fiber posts have the advantages of having same modulus of elasticity of dentin, using an all adhesive system and esthetically appealing in areas of high esthetic demands which all contributes to reinforcement of the remaining tooth structure, enhancing the esthetic outcome and reduce the mode of failure in comparison to regular metal posts.

Endocrowns are ceramic restorations that are mechanically anchored and adhesively strongly bonded to hard dental tissues using resin cements.

These restorations are fitted into the internal part of the pulp cavity chamber and margins. The advantages of endocrowns are limiting the

“Fracture Resistance of Endodontically Treated Maxillary Incisors Restored by Two Designed Endocrowns Using Two Materials”

*“Thesis submitted to the Department of Fixed Prosthodontics,
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Dedication

To

My Mother, you made me who I am today by your continuous support and encouragement. This work wouldn't have been achieved without your presence. Thank you for believing in me. I Love you...

My Father, may your soul rest in peace. I know you would have been so proud and you would have encouraged me throughout my study every step of the way.

My Siblings you helped through this entire process every step of the way, You are my life and the reason of my happiness. Love you deeply and unconditionally.

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List of Abbreviations

Abb.	Full term
EDTA.....	Ethylene Diamine Tetra acetic acid
FRC.....	Fiber reinforced composite
HTZ.....	High translucent zirconia
LDS.....	Lithium disilicate
NaOCl.....	Sodium Hypochlorite
PICN	Polymer infiltrated ceramic network
PICN	Polymer-infiltrated ceramic networks
RNC	Resin nanoceramics
ZRLS.....	Zirconium-reinforced lithium silicate