



**Ain Shams University**  
**Faculty Of Dentistry**  
**Department Of Oral Medicine,**  
**Periodontology, Diagnosis & Radiology**

# **PARTICULATE XENOGRAFT VERSUS CONNECTIVE TISSUE GRAFT IN A LABIAL SUBPERIOSTEAL POUCH AROUND IMMEDIATE DENTAL IMPLANT: A RANDOMIZED CLINICAL AND RADIOGRAPHICAL STUDY**

Thesis submitted in partial fulfilment of Master Degree in Oral Medicine,  
Periodontology, and Oral Diagnosis.

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## بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿وَلَقَدْ آتَيْنَا دَاوُودَ وَسُلَيْمَانَ عِلْمًا وَقَالَا الْحَمْدُ لِلَّهِ الَّذِي فَضَّلَنَا عَلَى كَثِيرٍ مِّنْ عِبَادِهِ الْمُؤْمِنِينَ﴾

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*Nada Sherif*

# **Dedication**

**This Work Is Dedicated To**

**To My Mom's Soul...**

*I Wish You Were Here.*

**To My Dad...**

*All That I Am Or Hope To Be, I Owe To You.*

**To MY Beloved Brothers...**

*Without Your Support And Love I Wouldn't Be Where I Am Today.*

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## LIST OF ABBREVIATIONS

<b>3D</b>	<b>Three Dimensional</b>
<b>BPP</b>	<b>Buccal Plate Preservation</b>
<b>BT</b>	<b>Bone Thickness</b>
<b>CBCT</b>	<b>Cone Beam Computed Tomography</b>
<b>FBT</b>	<b>Facial Bone Thickness</b>
<b>FBW</b>	<b>Facial Bone Width</b>
<b>FGG</b>	<b>Free Gingival Graft</b>
<b>GB</b>	<b>Gingival Biotype</b>
<b>GT</b>	<b>Gingival Thickness</b>
<b>GW</b>	<b>Gingival Width</b>
<b>IEG</b>	<b>Internal And External Grafting</b>
<b>IIP</b>	<b>Immediate Implant Placement</b>
<b>KM</b>	<b>Keratinized Mucosa</b>
<b>LPB</b>	<b>Labial Plate Of Bone</b>

<b>mBI</b>	<b>Modified Bleeding Index</b>
<b>MBL</b>	<b>Marginal Bone Level</b>
<b>mPI</b>	<b>Modified Plaque Index</b>
<b>PFM</b>	<b>Porcelain Fused To Metal</b>
<b>SCTG</b>	<b>Sub-Epithelial Connective Tissue Graft</b>
<b>TKB</b>	<b>Thick Biotype</b>
<b>TNB</b>	<b>Thin Biotype</b>

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**Arabic Summary**

## INTRODUCTION

After tooth extraction, a number of changes take place in the socket during the following 12 months of surgery. The width of the ridge will be reduced by 50% (about 5 to 7 mm). Two thirds of this resorption occurs after the first three months (**Schropp et al., 2003**). These changes horizontally and vertically are in hard and soft tissues (**Van der Weijden et al., 2009**). If the socket is not grafted immediately after dental extraction, resorption will happen in buccal plate (**Pietrokovski and Massler, 1967; Araujo et al., 2006**), which will increase the risk for facial soft tissue recession (**Pietrokovski and Massler, 1967**) and has significant adverse effects on the esthetics (**Brugnami and Caiazzo, 2013**).

Nowadays, the beautiful artistic part of implant is important as its functional stability. Implant esthetics has two constitutes: 1- natural tooth physiognomies, 2- creation of soft tissue frame by peri-implant soft tissue preservation with periodontal surgical techniques (**Ioannou et al., 2015**). To optimally preserve tissue, surgeons implement immediate implant placement (IIP) to maintain bone architecture (**Kan et al., 2005**). The Long-term stability of esthetics for an implant requires the implant to be surrounded by 1.8–2.0mm of vital bone (**Spray et al., 2000**).