Histological Analysis of Bone Healing After Socket Augmentation Using Platelet-Rich Fibrin Versus Xenogeneic Bone Graft

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Disclosure:

This study, ***STUDY 3*** is a part of a clinical research project conducted on socket augmentation to assess the effect of L-platelet rich fibrin (PRF) application on bone quality after tooth (teeth) extraction and the assessment of its effect in comparison to Xenograft on bone quality and quantity versus non augmentation.
This project included the thesis of my colleagues Mohammed Ashour, ***STUDY 1*** "Socket Augmentation Using Platelet Rich Fibrin versus Xenogeneic Graft. Clinical and Radiological Assessment", and Mohamed Saied, ***STUDY 2*** "Assessment of Primary Stability of Implants Inserted Into Sockets Augmented With Anorganic Bovine Bone Mineral or Platelet Rich Fibrin. A Clinical Study".

Dedication

This thesis is dedicated to:

My great teacher and messenger, Prophet Mohammed (Peace be upon him), who taught us the purpose of life.

My dear parents, the light that leads my way.

My beloved brothers, my backbone Mohammad and Ahmed.

My true friends and colleagues for their encouragement and cooperation.

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List of abbreviations:

CBCT: cone beam computed tomography.

ARP: Alveolar ridge preservation.

BMP: bone morphogenic protiens.

GBR: Guided bone regeneration.

DFDB: Demineralized freeze dried bone.

FDBA: Freeze dried bone allograft.

TCP: Tricalcium phosphate graft.

HA: Hydroxyapetite graft.

P-PRP: Pure platelet rich plasma.

L-PRP: leucocyte platelet rich plasma.

P-PRF: Pure platelet rich fibrin.

PRP: Platelet rich plasma.

PRF: Platelet rich fibrin.

L-PRF: leucocyte platelet rich fibrin

RBC: Red blood cells.

GFs: Growth factors.

PIT: Peak insertion torque.

RFA: Resonance frequency analysis.

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Introduction