

CLINICAL EVALUATION OF EARLY LOADING IMPLUS IMPLANT SYSTEM IN MAXILLA

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بسمالة الرعب الرعب

{ وقل ربي زدنى علما}

(صدق الله العظيم)

Dedication

To my mother who have been inspiring and encouraging with unreserved understanding throughout the course of my study years.

<u>To my father</u> who always believed and trust in me and gave me support throughout my whole life.

To my brothers and sisters for their unlimited support

<u>To all my friends</u> who was always beside me when I was in need to them.

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Abstract

Titanium implant surface characteristics have been modified by many methods as plasma spray, sandblasting and acid etching; which have been used to increase surface area and alter the micro-topography and texture of implant surface.

In this study the early loading protocol of single implant using Implus implant system which is treated by mixture of bio-organic acids(B.O.A.T) is compared with conventional(delayed loading) protocol in maxilla.

In this study the early loading protocol using Implus implant system is compared with conventional (delayed loading) protocol, ten implants were placed in to two equal groups, in the first group the implants were undergo early loading(after six weeks) while in the second group the implants undergo delayed loading(after twelve weeks).

The results had shown that there is no any difference between the implants which loaded in both groups, thus early loading of Implus implant system had shown to be reliable method in maxilla.

Keywords: dental implant, early loading, Implus implant system, maxilla.

Introduction

Endosseous dental implants gain greater acceptance among clinicians and patients. This has come about for several reasons, including excellent success rates published in long-term studies, improvements in fixture and abutment designs and more predictable surgical placement techniques⁽¹⁾.

In recent years, the utilization of endosseous implants for the rehabilitation of completely or partially edentulous patients has become a standard of care in dentistry. This progress is based on the concept of osseointegration first described *by Branemark et al (1969,1977).* although unaccepted at the time, it was proven later through the work of *Schroder et al.(1976,1981).* In the past 15 years, numerous prospective long-term studies have documented the high efficacy and predictability of osseointegrated implants (2,44).

Osseointegration simply denotes the intimate contact of bone to the implant surface. the clinical manifestation of histological osseointegration, has been defined by the immobility when special mechanical testing devices are activated⁽³⁾.