Journal of Applied Oral Science

CLINICAL OUTCOME OF NARROW DIAMETER IMPLANTS INSERTED INTO ALLOGRAFTS

Alexandre Franco, Alessandro Leonardo, L. and Fernando Carlos Oliveira

Received: 2 October 2018
Accepted: 2 October 2018

Abstract

Narrow diameter implants (NDI) i.e. diameter ≤ 3.75 mm are a promising option to treat edentulous ridges with limited mesiodistal space. Although NDI have been used in clinical practice for more than two decades, clinical evidence is still scarce. Most studies are available in clinical practice since the 1990s, but most of these studies are retrospective in nature and reviews and meta-analyses investigated NDI mainly in the posterior mandible. Purpose: This is a retrospective study on a series of NDI placed in the anterior maxilla and in the posterior mandible.

Keywords: Kaplan Meier algorithm, Cox proportional hazard, narrow diameter implants, allograft.

INTRODUCTION

Narrow diameter implants (NDI) i.e. diameter ≤ 3.75 mm are a promising option to treat edentulous ridges with limited mesiodistal space. Although NDI have been used in clinical practice for more than two decades, clinical evidence is still scarce. Most studies are available since the 1990s, but most of these studies are retrospective in nature and long-term results with this type of implant are still lacking. Most of the studies investigated the clinical performance of NDI in the posterior mandible. Nevertheless, there is no report on the clinical performance of NDI in the anterior maxilla and in the posterior bone of PMA grafts.

Bone loss of Maxillary Posterior Ridges is well available in the literature. Among the causes, the loss of the posterior maxillary bone is a common and well known phenomenon. Although, the loss of the posterior maxillary bone is a common and well known phenomenon, the clinical management of the posterior maxillary bone is still a challenge.

Meta-analyses of Randomized Controlled Trials (RCTs) have shown that the use of bone grafts in the posterior maxilla improves the performance of implants. Bone substitutes have been used in the posterior maxilla to increase the amount of available bone. Autografts are considered the gold standard for bone grafting. Nevertheless, the use of autografts is associated with clinical complications, such as donor site morbidity, increased surgical time, and increased costs. Allografts are a viable option to avoid donor site morbidity and increased surgical time. Although, the use of all