



Our Research is Your Success...

April  
2016

**JO** JOURNAL OF  
OSSEOINTEGRATION

”

## Marginal Bone Level Around Conical Connection Tapered Implants with Platform Switching: A Multicenter Retrospective Study at 14 Months Follow-Up”

J. Ekstein; M. Tandelich; J. Nart;  
J.L. Calvo Guirado; L. Shapira

Ekstein J, Tandelich M, Nart J, Calvo Guirado JL, Shapira L Marginal bone level around conical connection tapered implants with platform switching: A multicenter retrospective study at 14 months follow-up. Journal Osseointegr, August 2016. DOI: 10.4081/jo.2016.6922



<sup>1</sup>J. Ekstein  
<sup>1</sup>M. Tandelich  
<sup>2</sup>J. Nart  
<sup>3</sup>J.L. Calvo Guirado  
<sup>4</sup>L. Shapira

# “Marginal Bone Level Around Conical Connection Tapered Implants with Platform Switching: A Multicenter Retrospective Study at 14 Months Follow-Up”

## SUMMARY.

### Aim

The long-term success of dental implants mainly depends on marginal bone stability around the fixtures. The development of prosthetic abutments with reduced width in relation to the implant prosthetic platform (platform switching) and/or tighter implant/abutment connections seem to have a potential in reducing crestal bone resorption. The aim of the present study was to examine the effect of platform switching and conical connection design, on marginal bone loss around newly designed dental implants.

### Methods

Subjects who underwent implant therapy in three different centers, were enrolled in the present retrospective study. Patients were rehabilitated with tapered platform-switched dental implants. To evaluate marginal bone level changes over time, the mesial and distal bone height was radiographically evaluated on the day of implant placement (baseline) and 14 months post-implantation.

### Results

One hundred and twelve conical tapered platform-switched implants (C1, MIS Implants Technologies Ltd.) were placed in three different centers in 37 patients, with mean age of 53 years. The survival rate was 100% after an average follow-up of 14 months. During the first year, marginal bone loss was  $0.67 \pm 0.45$ mm. No statistically significant differences were recorded between the different centers.

### Conclusions

Within the limitations of the present retrospective study, limited marginal bone loss and 100% implant survival rate were observed over 14 months of follow-up. The results showed high crestal bone stability around the newly designed conical tapered platform-switched implants.



Fig.1. Periapical X-rays – day of stage 2 surgery.

Fig.2. Periapical X-rays – 1 year results.

#### Authors' affiliations

<sup>1</sup> Department of Periodontology, the Hebrew University – Hadassah Faculty of Dental Medicine, Jerusalem, Israel

<sup>2</sup> Department of Periodontology, International University of Cataluña, Barcelona, Spain

<sup>3</sup> Department of General and Implant dentistry, Faculty of Medicine and Dentistry, University of Murcia, Spain

<sup>4</sup> Professor And Chair Department of Periodontology The Hebrew University-Hadassah Faculty of Dental Medicine, Jerusalem, Israel