

VANLIOĞLU B<sup>1</sup>, ÖZKAN Y<sup>2</sup>, KULAK-ÖZKAN Y<sup>1</sup>

1. Department of Prosthodontics, Marmara University Faculty of Dentistry, İstanbul, Turkey.
2. Department of Oral and Maxillofacial Surgery, Marmara University Faculty of Dentistry, İstanbul, Turkey.

**Objectives:** The aim of this clinical study was to evaluate the outcome of 253 Camlog implants in the posterior maxilla and mandible in 67 patients after 10 years of functional loading; to report the incidence of the most common technical problems, in implant-supported fixed partial dentures (FPDs), and to assess the survival and success rate (event-free survival) after 10 years of function.

**Materials and Methods:** Patients with missing posterior teeth were treated with implants and follow-up examinations were scheduled 1 week after suprastructure placement, after 6 months and annually for 10 years. Clinical parameters like plaque index (PI), sulcus bleeding index (BI), peri-implant probing depth (PD), and marginal bone loss (MBL) were recorded along with any biological and mechanical complications at baseline and recall evaluations. Repeated-measurement ANOVA, Kruskal-Wallis test, Wilcoxon signed rank test and paired samples test were used for statistical analysis (p=.05). Complications with implant supported restorations were recorded. Success was defined as event-free survival. Survival and success probabilities were estimated with the Kaplan–Meier estimator.

**Results:** In 67 patients, a total of 253 implants were placed and restored with 143 implant-supported FPDs (63 single crowns, 80 FPD bridges). Cumulative implant survival rate was 100 %. At 10 years, the mean PD value was 2.33 (0.58) mm, and MBL was 0.35 mm. The survival rate of FPDs supported by implants was 97.94 % after mean follow-up of 10 years. The success rate (event-free survival) of the FPDs was 96.9%.

Table 1. Patient and implant-related parameters investigated in this study.

**Patient-related parameters**

**Gender**

Male: n= 30

Female: n= 37

**Age**

Mean: 34.5 years

Minimum: 22 years

Maximum: 50 years

**Type of supra-structure**

Single crown, n= 63

Fixed partial denture, n= 80

**Area and number of implants**

Premolar: 142

Molar: 101

Maxilla: 137

Mandible: 116

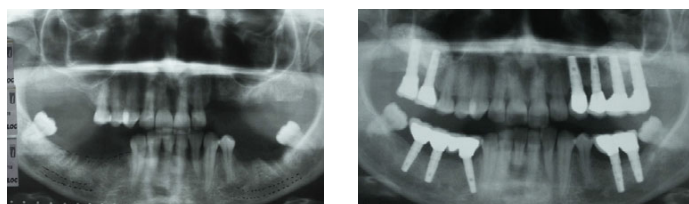
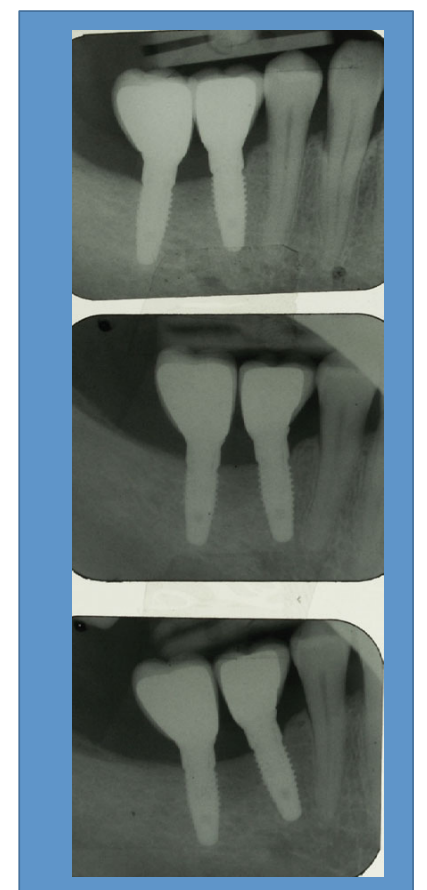


Table 2. Mean Probing Depth measurements at baseline and recall.

Time	Mean	Sd
Baseline	1.32	0.45
6 months	1.37	0.6
12 months	1.42	0.47
2 year	1.43	0.51
3 year	1.75	0.46
4 year	2.21	0.69
5 year	2.25	0.59
10 year	2.33	0.58

Table 3. Marginal bone level change at 6 month and recall evaluations.

Time	Mean	Sd
6 months	0.08	0.03
12 months	0.14	0.02
2 year	0.24	0.03
3 year	0.3	0.05
4 year	0.33	0.07
5 year	0.34	0.07
10 year	0.35	0.11



Parameters	Patient satisfaction			
	Excellent	Good	Satisfactory	Poor
	n	%	n	%
Esthetics	208	82	45	18
Masticatory ability	215	85	38	15
Phonetics	253	100	-	-
Cleansability	235	93	18	7

**Address:** Assoc. Prof. Dr. Burçin Vanlioğlu  
Marmara University Faculty of Dentistry,  
İstanbul, Turkey,  
[burcin.akoglu@marmara.edu.tr](mailto:burcin.akoglu@marmara.edu.tr)  
[drburcinakoglu@hotmail.com](mailto:drburcinakoglu@hotmail.com)

**Conclusions:** Fixed partial dentures supported by Camlog implants showed high clinical and radiographic outcomes and low technical complications rates at 10 years.