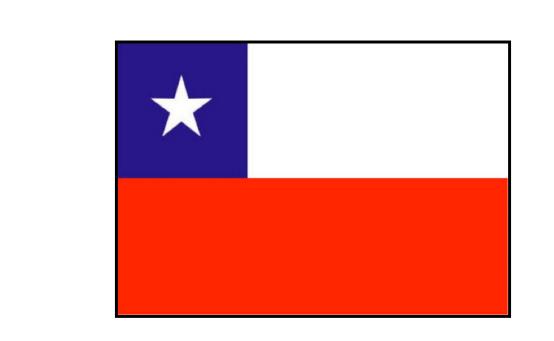


SHORT DENTAL IMPLANTS: A REALITY FOR COMPLEX CASES

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CASE 2

ABSTRACT

PURPOSE: To evaluate the performance of short implants. MATERIALS AND METHODS: A retrospective cohort study was conducted between October 2009 and August 2013. The sample was composed of patients who had received at least one short implants, Bicon implant. RESULTS: Forty subjects who received 124 implants were followed for an average of 47 months. One hundred five implants (84.68%) were restored with single crowns. Three implants failed, for a cumulative survival rate of 97.58%. Of the failed implants, all were of 5 x 6.0mm. CONCLUSIONS: The survival of short implants was comparable with normal implants.

INTRODUCTION

Implant therapy based on the principle of implant osseointegration has been very well documented and is accepted widely. However, the placement of long dental implants in some anatomic sites, such as the posterior maxilla and mandible, may be limited by the residual ridge height.

RESULTS

Table 1: Demographic, health status and anatomic variables

Short Implants K/n			
Number of Implants (k) Number of Patients (n)		Short Implants	
Number of Patients (n) 40 100		k/n	%
Number of Patients (n) 40 100	Number of Implants (k)	124	100
Sender S	Number of Patients (n)	40	100
Women 93/25 75 Men 31/15 25 Mean age at Implant Placement 55.5 ± 11.85 Years ASA I 28 22.58 ASA II 96 77.42 ASAIII 0 0 Current Tobacco Use 0 0 No 90 72.58 742 Yes 34 27.42 27.42 Jaw Amaxilla 77 62.1			
Men 31/15 25 Mean age at Implant Placement 55.5 ± 11.85 Years ASA Status (k=124) 28 22.58 ASA II 96 77.42 ASAIII 0 0 Current Tobacco Use No 90 72.58 Yes 34 27.42 Jaw Maxilla 77 62.1 Mandible 47 37.9 Location 13 10.48 Posterior 111 89.52 Tooth-type Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality 5 4.03 Type II 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68		k/n	%
Mean age at Implant Placement ASA Status (k=124) ASA I 28 22.58 ASA II 96 77.42 ASAIII 0 0 Current Tobacco Use No 90 72.58 Yes 34 27.42 Jaw Maxilla 77 62.1 Mandible 47 37.9 Location Anterior 13 10.48 Posterior 111 89.52 Tooth-type Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality Type II 50 40.32 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Women	93/25	75
ASA Status (k=124) ASA I	Men	31/15	25
ASA I	Mean age at Implant Placement	55.5 ± 11.85 Years	
ASA II 96 77.42 ASAIII 0 0 0 Current Tobacco Use No 90 72.58 Yes 34 27.42 Jaw Maxilla 77 62.1 Mandible 47 37.9 Location Anterior 13 10.48 Posterior 111 89.52 Tooth-type Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality Type I 5 4.03 Type II 50 40.32 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	ASA Status (k=124)		
ASAIII 0 0 0 Current Tobacco Use No 90 72.58 Yes 34 27.42 Jaw Maxilla 77 62.1 Mandible 47 37.9 Location Anterior 13 10.48 Posterior 111 89.52 Tooth-type Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality Type I 5 4.03 Type II 50 40.32 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	ASAI	28	22.58
Current Tobacco Use No 90 72.58 Yes 34 27.42 Jaw Maxilla 77 62.1 Mandible 47 37.9 Location Anterior 13 10.48 Posterior 111 89.52 Tooth-type Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality Type I 5 4.03 Type II 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	ASA II	96	77.42
No 90 72.58 Yes 34 27.42 Jaw Maxilla 77 62.1 Mandible 47 37.9 Location Anterior 13 10.48 Posterior 111 89.52 Tooth-type Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality 3 40.32 Type II 50 40.32 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	ASAIII	0	0
Yes 34 27.42 Jaw Maxilla 77 62.1 Mandible 47 37.9 Location Anterior 13 10.48 Posterior 111 89.52 Tooth-type Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality 5 4.03 Type II 50 40.32 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Current Tobacco Use		
Maxilla	No	90	72.58
Maxilla 77 62.1 Mandible 47 37.9 Location 37.9 Anterior 13 10.48 Posterior 111 89.52 Tooth-type 111 89.52 Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality 5 4.03 Type I 50 40.32 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Yes	34	27.42
Mandible 47 37.9 Location 13 10.48 Anterior 13 10.48 Posterior 111 89.52 Tooth-type Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality 5 4.03 Type II 50 40.32 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Jaw		
Location Anterior 13 10.48 Posterior 111 89.52 Tooth-type Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality 5 4.03 Type I 50 40.32 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Maxilla	77	62.1
Anterior 13 10.48 Posterior 111 89.52 Tooth-type Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality Type I 5 4.03 Type II 50 40.32 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Mandible	47	37.9
Posterior Tooth-type Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality Type I 5 4.03 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Location		
Tooth-type Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality Type I 5 4.03 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Anterior	13	10.48
Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality Type I 5 4.03 Type II 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Posterior	111	89.52
Incisor 13 10.48 Canine 3 2.40 Premolar 45 36.29 Molar 63 50.80 Bone Quality Type I 5 4.03 Type II 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Tooth-type		
Premolar 45 36.29 Molar 63 50.80 Bone Quality 5 4.03 Type I 50 40.32 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	_	13	10.48
Molar 63 50.80 Bone Quality 5 4.03 Type I 50 40.32 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Canine	3	2.40
Bone Quality Type I 5 4.03 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Premolar	45	36.29
Type I 5 4.03 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Molar	63	50.80
Type II 50 40.32 Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration 105 84.68	Bone Quality		
Type III 50 40.32 Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Type I	5	4.03
Type IV 19 15.32 Type of Prosthesis/Restoration Single Crown 105 84.68	Type II	50	40.32
Type of Prosthesis/Restoration Single Crown 105 84.68	* • • • • • • • • • • • • • • • • • • •	50	
Single Crown 105 84.68	Type IV	19	15.32
	Type of Prosthesis/Restoration		
	Single Crown	105	84.68
10102	Fixed Prosthesis/Splinted	19	15.32

Table 2: Kaplan-Meier Survival Analysis of Short Implants:

Time Months	Number of Short Implants at Risk	Survival (%)
0	124	100
6	122	98.38 ± 0.062
12	121	97.58 ± 0.065
18	121	97.58 ± 0.065
24	121	97.58 ± 0.065
30	121	97.58 ± 0.065
36	121	97.58 ± 0.065
42	121	97.58 ± 0.065
47	121	97.58 ± 0.065

CASE 1

