

Important Numbers in Implant Dentistry

5-YEARS

IMMEDIATE LOADING OF SINGLE-TOOTH ANYRIDGE IMPLANTS A 6-month interim report of a 5-year prospective multicenter clinical study

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Object

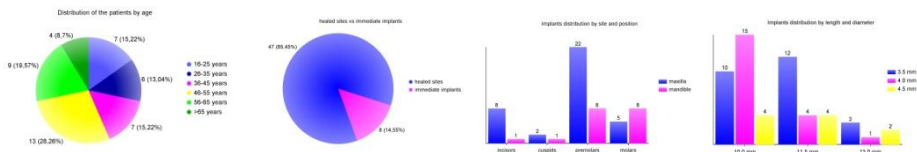
The aim of the present prospective clinical study was to evaluate the survival and success rate of immediately loaded single-tooth AnyRidge implants (MegaGen, Seoul, South Korea).

Materials and Methods

Patients were recruited at 6 clinical centers. Inclusion criteria were single-tooth replacement in fully healed sites or post-extraction sockets, and patients with adequate bone height and width, to place an implant of at least 3.5 mm in diameter and 10.0 mm in length. Exclusion criteria were patients with active periodontal infections, patients with uncontrolled diabetes, patients with parafunctions (bruxism). All the implants were loaded immediately after placement with temporary acrylic resin restorations. Temporary crowns were adjusted with light occlusal marks to avoid interfering or premature contacts. After three months, the provisional crowns were replaced by definitive metal-ceramic crowns. Regular follow-ups were performed during the investigation period. The implants were followed for a minimum period of 6 months, after which the implant survival and the implant-crown success rates were assessed. To achieve implant-crown success, the following success criteria had to be fulfilled: absence of pain or suppuration, absence of clinically detectable implant mobility, probing depth (PD) < 5.0 mm for each of the 4 sites investigated (mesial-distal-vestibular-palatal/lingual) around the implant; absence of continuous peri-implant radiolucency, distance between the implant shoulder and the first visible bone contact (DIB) < 1.5 mm; absence of any prosthetic complications.

Results

No drop-out occurred. Fifty-five implants (37 maxilla, 18 mandible) were placed in 46 patients (23 males, 23 females, aged between 16-69 years) in 6 different clinical centers. Seventeen patients were smokers and thirteen patients had a poor oral hygiene. Eight implants were placed in post-extraction sockets. Only one implant was lost, in a healed site (maxillary premolar) for a 6-month overall survival rate of 98.2%. Only minor prosthetic complications were noted, with two loosened abutments, and overall patient satisfaction was high: the implant-crown success rate was 96.3%.



Conclusions

Although it is an interim report, the use of AnyRidge implants seems to represent a successful procedure for single tooth replacement with immediate loading protocol.

References

1. Vandeweghe S, Nicolopoulos C, Thevissen E, et al. Immediate loading of screw-retained all-ceramic crowns in immediate versus delayed single implant placement. *Int J Prosthodont* 2013; 26:458-464.
2. Di Alberti L, Donini F, Di Alberti C, et al. Clinical and radiologic evaluation of 70 immediately loaded single implants in the maxillary esthetic zone: preliminary results after 1 year of functional loading. *Int J Oral Maxillofac Implants* 2012; 27:181-186.