

## Acknowledgments

We are grateful to the participants and staff of the Single Implant Research Project within the Oral Implantology Area of Research Strength, School of Dentistry, University of Otago, Dunedin, New Zealand. In addition, Southern Implants (Irene, South Africa) and Radiographic Supplies (Christchurch, New Zealand) are acknowledged for their generous support of this clinical trial.

## References

1. Zarb GA, Albrektsson T (eds). Consensus report: Towards optimized treatment outcomes for dental implants. *Int J Prosthodont* 1998;11:385–386.
2. Walton TR. The outcome of implant-supported fixed prostheses from the prosthodontic perspective: Proposal for a classification protocol. *Int J Prosthodont* 1998;11:595–601.
3. Jemt T. Regeneration of gingival papillae after single-implant treatment. *Int J Periodontics Restorative Dent* 1997;17:327–333.
4. Belser U, Buser D, Higginbottom F. Consensus statements and recommended clinical procedures regarding esthetics in implant dentistry. *Int J Oral Maxillofac Implants* 2004;19(suppl):73–74.
5. Lekholm U, Zarb G. Patient selection and preparation. In: Brånemark P-I, Zarb G, Albrektsson T (eds). *Tissue-Integrated Prostheses: Osseointegration in Clinical Dentistry*. Chicago: Quintessence, 199–209.

## Literature Abstract

### Mandibular overdentures supported by 2 or 4 endosseous implants

The aim of this 5-year prospective comparative study was to evaluate treatment outcome (survival rate, condition of hard and soft peri-implant tissues, patient satisfaction, prosthetic and surgical aftercare) of mandibular overdentures supported by 2 or 4 implants. Sixty edentulous patients (39 women, 21 men; mean age 54.9 years; median 52 years; range 38 to 81 years) with a mandibular height between 12 and 18 mm (Cawood Classification V-VI) participated and were randomly assigned to 2 groups. Thirty patients were treated with an overdentures supported by 2 IMZ implants (group A) and 30 patients were treated with an overdentures supported by 4 IMZ implants (group B). Standardized clinical (presence of plaque, calculus and bleeding) and radiographic (mesial and distal bone level using reproducible radiograph with beam direction device) parameters were evaluated 6 weeks after completion of the prosthetic treatment and after 1, 2, 3, 4, and 5 years of functional loading. Prosthetic and surgical aftercare was scored during the evaluation period. The patient satisfaction questionnaires consisted of 54 items divided in 6 scales: A) 9 items concerning functional problems of the mandibular dentures; B) 9 items concerning functional problems of the maxillary dentures; C) 18 items concerning functional problems/complaints in general; D) 3 items concerning facial esthetics; E) 3 items concerning accidental lip, cheek, and tongue biting; F) 12 items concerning esthetics of the dentures. One implant was lost (group A) during the healing period giving a success rate of 99%. There were no significant differences with regard to any of the studied clinical or radiographic parameters of the peri-implant tissues between the groups. None of the patients reported sensory disturbances in the lip or chin region. No differences in satisfaction were observed between the groups. With regard to aftercare, there was a tendency of a greater need of prosthetic interventions in group A, while correction of soft-tissue problems was restricted to patients of group B. There is no difference in clinical and radiographical state of patients treated with an overdenture on 2 or 4 implants during a 5-year evaluation period. Patients of both groups were as satisfied with their overdentures.

**Visser A, Raghoobar GM, Meijer HJA, Batenburg RHK, Vissink A.** *Clin Oral Implants Res* 2005;16:19–25. **References:** 29. **Reprints:** Dr A Visser, Dept of Oral and Maxillofacial Surgery and Maxillofacial Prosthodontics, University Hospital Groningen, PO Box 30.001, NL-9700 RB Groningen, The Netherlands. Fax: +31-(0)50-3611136. E-mail: a.visser@kchir.azg.nl—*Tee-Khin Neo, Singapore*

Copyright of International Journal of Prosthodontics is the property of Quintessence Publishing Company Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.