Abstract

Posterior Region of the Jaws—Results from One-Year Follow-Up

Keywords: cementogenesis; marginal bone level; space replacement; posterior mandibular implants

Introduction

Space replacement is not a simple process. The placement of implants in the posterior region of the jaws presents some challenges that are still to be overcome in the pursuit of predictable and reliable results.

Material and Methods

Twenty-one groups of five or four implants were placed in 42 edentulous jaws. Implants were placed in the posterior maxilla or mandible. One year after loading, the success rate was evaluated and the cephalometric, panoramic, and periapical radiographs were compared to the actual measurements, intra-observer error was identified in any of the groups. There was no statistically significant difference between the groups regarding the above comparison of radiographic bone height and probing measurements of 3.5 mm. The differences in marginal bone change from implant shoulder to the first point of bone/implant contact. The differences in marginal bone change were only statistically significant in one case, with a bone loss of 1.2 mm.

Results

The mean percentage of mobility was 0.64% (SD 0.52) and 0.58% (SD 0.47) in the NDIs and Test groups, respectively. There was no statistically significant difference between the groups regarding mobility and supurration 1 year after loading in Groups 1 and 2. The mean percentage of mobility in the Test and Control groups was 0.76% (SD 0.54) and 0.72% (SD 0.48), respectively, with no statistically significant difference between the groups.

Discussion

Regardless implant diameter (regular or narrow), the posterior maxilla or mandible. One year after loading, the success rate was evaluated and the cephalometric, panoramic, and periapical radiographs were compared to the actual measurements, intra-observer error was identified in any of the groups. There was no statistically significant difference between the groups regarding the above comparison of radiographic bone height and probing measurements of 3.5 mm. The differences in marginal bone change from implant shoulder to the first point of bone/implant contact. The differences in marginal bone change were only statistically significant in one case, with a bone loss of 1.2 mm.

Conclusion

The results of this study suggest that it is possible to achieve reliable and predictable implant success in the posterior region of the jaws. The use of posterior implants, either in the maxilla or mandible, can be considered a useful tool in the treatment of edentulous patients. With the posterior region of the jaws included in the study, Twenty one groups of five or four implants were placed in 42 edentulous jaws. Implants were placed in the posterior maxilla or mandible. One year after loading, the success rate was evaluated and the cephalometric, panoramic, and periapical radiographs were compared to the actual measurements, intra-observer error was identified in any of the groups. There was no statistically significant difference between the groups regarding the above comparison of radiographic bone height and probing measurements of 3.5 mm. The differences in marginal bone change from implant shoulder to the first point of bone/implant contact. The differences in marginal bone change were only statistically significant in one case, with a bone loss of 1.2 mm.

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