CLINICAL AND RADIOGRAPHIC OUTCOME OF DELAYED PLACEMENT, PLATFORM SWITCHED DENTAL IMPLANTS: A PROSPECTIVE STUDY

By

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ABSTRACT

Objectives:

The purpose of this study was to determine the clinical and radiographic outcome of platform switched dental implants, for a period of 9 months after placement.

Methodology:

Fourteen patients with atleast one edentulous site were treated by placement of dental implants in which platform switching was possible. After 6-8 weeks all the implants were loaded with abutments of smaller diameter following which provisional restorations were given. After 3 months, permanent restorations (porcelain fused metal) were given. Clinical parameters including plaque index, gingival index, sulcular bleeding index, mobility and radiographic crestal bone level were evaluated at baseline, 3, 6, and 9 months. Probing depth was measured at 6 & 9 months.

Results:

All fourteen patients with a mean age of 33.43 ± 10.80 years were regularly followed up during the entire 9 month period. Plaque index, gingival index, sulcus bleeding index around the implant and full mouth were comparable and changes in these indices were statistically significant. Pocket depth was maintained around implants at all intervals. None of the implants were clinically mobile during the follow up period. Radiographically, when the intra oral periapical radiographs were analysed through Image J analysis, some crestal bone resorption was observed at 3 months which returned to baseline levels at 6 and 9 months of recall.

Interpretation and Conclusion:

The crestal bone preservation in platform switched implants was predictable with minimal crestal bone loss during a follow- up period of 9 months.

Key words:

osseointegration; platform switching; implant abutment junction; inflammatory connective tissue; biologic width.