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Radiographic Change Around Immediately Restored Dental Implants in Periodontally Susceptible Patients: 1 Year Results” *

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ABSTRACT.

Purpose

There is little information available about radiographic bone changes around immediately restored implants in periodontally compromised patients. The aims of this study were to evaluate the effect of immediate restoration on radiographic bone changes and to compare radiographic changes between arches and between healed and extraction sites in periodontally susceptible patients.

Materials and methods

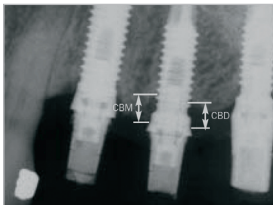
Patient received periodontal treatment.”All in one” implant surgery was then performed: Hopeless teeth were extracted, debridement around remaining adjacent teeth was performed, implants were inserted guided by a surgical stent, and a prefabricated screwed provisional restoration was immediately delivered on selected implants. periapical radiographs using a parallelism appliance were taken at implant surgery and 6 and 12 months postsurgery.The distance between the alveolar crest and the implant shoulder was measured at the mesial and distal aspect of each implant. Bone changes were compared between immediately restored,submerged,and nonrestored implants; between arches; and between healed and extraction sites.

Results

Nineteen patients were treated, receiving 74 implants. Twelve implants in 4 patients failed, ten of which were maxillary. Survival rates were 93% in mandibular full arches, 52% in maxillary full arches, and 100% in partial arch restorations. Implants exhibited a decrease in ISQ at 6 months followed by an increase at 12 months. There was no statistically significant difference between failed and successful implants in IT and ISQ. Non extraction and extraction sites demonstrated no significant differences in IT, and ISQ. Mandibular implants demonstrated a higher IT and ISQ at baseline, 6 and 12 months.

Conclusion

First-year bone changes around immediately restored dental implants in periodontally susceptible patients were slightly higher than most reports in the literature.This indicates a potential influence of periodontal disease on the success rate of dental implants.



Radiographic measurement of bone level changes. CBM = the distance between the implant shoulder and the mesial bone level. CBD = the distance between implant shoulder and the distal bone level.

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