Title: Comparative evaluation of soft tissue characteristics around implant and tooth.

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Background and Aim: Soft tissue condition around dental implant is an essential part for long term healthy and esthetic outcome. The aim of this study was to compare soft tissue dimensions between implant supported single tooth implant at least 1 year ago. Of twenty eight, fourteen patients had been treated with one stage method and others with two stage method. Biologic width (BW), papilla index (PI), and mucosal thickness (MT) were evaluated around implants and contra-lateral teeth clinically and compared with each other. The Wilcoxon test, Mann-Whitney test, and Student pair t-test were used to assess the differences between one stage and two stage implants, and implant and tooth groups.

Results: The mean BW around one stage implants, two stage implants, and contra-lateral teeth were 1.42±0.48 mm, 1.67±0.48 mm, and 1.47±0.60 mm, respectively. The mean PI adjacent to one stage implants, Two stage implants, and contra-lateral teeth were 2.50±0.52, 2.53±0.55, and 2.72±0.47, correspondingly. The mean MT around one stage implants, two stage implants, and contra-lateral teeth were 3.10±0.48, 3.09±0.75, and 2.57±0.88, respectively. There was no statistically significant difference among one stage implants, two stage implants, and contra-lateral teeth with regard to measured variables.

Conclusion: Based on the results of this investigation, in standard condition, it seems that there is no noticeable difference in indicators of: biologic width, papilla index, and mucosal thickness around one stage implants, two stage implants, and contra-lateral teeth.

Key Words: One stage; Two stage; Implant; Biologic Width; Papilla; Biotype; Mucosal Thickness