



0401

Individualized Healing Significantly Improves Pink Esthetics Around Immediate Single Implants

X. Qian^{1,2}, B. Vánkos^{1,2}, B. Kispélyi^{1,2}, K. Kelemen^{1,2}, G. Agócs^{2,3}, P. Hegyi^{2,4}, P. Hermann^{1,2}, K. Mikulás^{1,2}

¹Department of Prosthodontics, Semmelweis University, Budapest, Hungary, ²Centre for Translational Medicine, Semmelweis University, Budapest, Hungary, ³Department of Biophysics and Radiation Biology, Semmelweis University, Budapest, Hungary, ⁴Institute for Translational Medicine, University of Pécs, Budapest, Hungary

Objectives We aim to compare hard and soft tissue parameters resulting from utilizing AHA or PR vs round healing abutments (RHA) on immediately placed single implants, by a systematic review of the currently available literature.

Methods A systematic search was conducted in four databases to select two armed studies investigating AHA or PR vs RHA on single, immediate implants in any region of the jaw in healthy adult subjects, comparing their effects on implant survival (IS), marginal bone loss (MBL), pink esthetic score (PES), and patient satisfaction measured with visual analogue scales. A random effects model was applied to pool mean differences (MD). Confidence intervals (CI) were calculated with 1-alpha=95%.

Results Based on the meta-analysis of 18 studies, the shape of the healing abutment does not affect IS, MBL or patient satisfaction. The pooled comparison of AHA or PR vs RHA showed statistically significantly higher PES for the AHA/PR group at 1-year follow-up, including one study with 8 months follow-up, based on the comparison of 344 implant sites in seven studies. MD (95% CI) was 2.13 (0.70; 3.57). The AHA group contributed by only two studies, due to this low number, no statistically significant differences were found in its subgroup analysis.

Conclusions Utilizing different shapes of the healing abutments showed no significant effect on IS, MBL, and satisfaction, but the PR group resulted in significantly better PES, therefore immediate provisionalization is recommended, especially in the esthetic region, and further standardized studies are needed to evaluate the effect of AHA and PR.