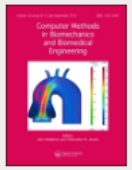

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Articles

Influence of transmucosal height in abutments of single and multiple implant-supported prostheses: a non-linear three-dimensional finite element analysis

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Abstract

The aim of this study was to analyze the influence of three different transmucosal heights of the abutments in single and multiple implant-supported prostheses through the finite element method. External hexagon implants, MicroUnit, and EsthetiCone abutments were scanned and placed in an edentulous maxillary model obtained from a tomography database. The simulations were divided into two groups: (1) one implant with 3.75 × 10 mm placed in the upper central incisor, simulating a single implant-supported fixed prosthesis with an EsthetiCone abutment; and (2) two implants with 3.75 × 10 mm placed in the upper lateral incisors with MicroUnit abutments, simulating a multiple implant-supported prosthesis. Subsequently, each group was subdivided into three models according to the transmucosal height (1, 2,