

عنوان مقاله:

Numerical Contact Analysis of Periodontal Ligament under Tooth Mobility by Considering Its Viscoelastic Constitutive Behavior

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خلاصه مقاله:

In this paper, we attempt to significantly model the viscoelastic constitutive characteristics of the PDLs, by developing a generalized Wiechert model to consider their timedependent behavior. The PDL is the most deformable component of the periodontum and the mainly responsible for modeling of tooth mobility. The analysis of contact between the PDL and tooth is completely considered by a three-dimensional finite element simulation. The contact behavior has been studied through an augmented Lagrangian optimization approach. The results show a general, reliable and .efficient numerical contact approach that provides good prediction

کلمات کلیدی:

;FEM; Tooth Mobility; Viscoelastic Behavior; Contact Analysis; Periodontal Ligament

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