

Stress Study in Implants Dental

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Abstract : This study focuses on the mechanical behavior of a dental prosthesis subjected to dynamic loads chewing. It covers a three-dimensional analysis by the finite element method, the level of distribution of equivalent stresses induced in the bone between the implants (depending on the number of implants). The studied structure, consisting of a braced, implant and mandibular bone is subjected to dynamic loading of variable amplitude in three directions coronal-apical, mesial-distal and bucco-lingual. These efforts simulate those of mastication. We show that compared to the implantation of a single implant, implantology using two implants promotes the weakening of the bones. This weakness is all the more likely that the implants are located in close proximity to one another.

Keywords : stress, bone, dental implant, distribution, stress levels, dynamic, effort, interaction, prosthesis

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