COMMENTARY

THE APPARENT CONTACT DIMENSION AND COVARIATES AMONG ORTHODONTICALLY TREATED AND NONTREATED SUBJECTS

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This article evaluates the relationship of the apparent tooth contact dimensions among the maxillary central incisor, lateral incisor, and canine relative to the clinical crown length of the maxillary central incisor as measured on dental casts in adolescents and young adults. In addition, the article attempts to identify if differences in tooth inclination and/or tooth shape have an effect on the apparent contact dimension. It was interesting to note that, in what must be considered an ideal situation (orthodontically treated or nontreated excellent occlusions of young subjects), there was a relatively predictable relationship among the contact lengths between the anterior teeth and the relative crown length of the maxillary central incisor. With that said, we must interpret the results of this study with extreme care. After all, the subjects were young and no periodontal assessment of sulcus depth or location of the cementoenamel junction (CEJ) or bone level was given. Is it really possible to assess the true crown length of the maxillary central incisor at this young age without knowing where the CEJ is located? I think not. It is highly likely that the central incisors are actually longer than reported because of the fact that some of these subjects are likely still growing; therefore, the teeth are still erupting and the relationship between gingival margin level and CEJ is not likely stable. If the teeth were actually longer than what was measured on the dental casts, then the percentage relationship between the apparent contacts and the length of the central incisor would be different than reported. I compliment the authors for their efforts and I do agree that the results of this study confirm that there is a relationship between the apparent contact lengths and the length of the central incisor, but I am suspicious that the authors have probably not identified the actual tooth lengths and percentages because they merely measured dental casts without any knowledge of the location of the CEJ and bone level in a sample of young subjects.

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