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Changes in dentofacial structures in untreated Class II division 1 and normal subjects: A longitudinal study

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ABSTRACT

The purpose of this study was to compare longitudinally the changes that occur in dentofacial structures from the deciduous to the permanent dentitions in untreated Class II division 1 and normal individuals. Complete records were assembled for 65 subjects at three stages of development: at the completion of the deciduous dentition, after the first permanent molars had erupted completely, and after the permanent dentition had erupted completely (third molars excluded). On a cross-sectional basis, only mandibular length (Ar-Pog) differed significantly in the two groups, and then only during the earlier stages of development; by the later stage, the difference was not significant, indicating that some “catch up” growth may occur in Class II individuals. Longitudinal comparisons of the curve profiles, i.e., growth trends between Class II division 1 and normal subjects, indicated that there were no significant differences between the two groups except in upper lip protrusion. Comparisons of the total change from the deciduous to the permanent dentition indicated the presence of a number of significant differences between Class II division 1 and normal subjects, including larger magnitude of maxillary and mandibular lengths in the normal group and greater skeletal and soft tissue convexities in the Class II group.

KEY WORDS: Normal, Class II division 1, Untreated, Longitudinal, Cephalometrics.

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