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Tooth size and arch dimension in uncrowded versus crowded class I malocclusions

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Abstract

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Aim: The purpose of this investigation was to examine the extent to which arch dimension or tooth size contributes to dental crowding. **Methods and Materials:** Two groups of dental casts were selected. Each group consisted of 30 pairs of dental casts including equal male and female samples. The first group had Class I malocclusions without crowding or spacing. The second group exhibited Class I malocclusions with severe dental crowding (> a 5 mm space deficiency). The following parameters were measured and used to compare the two groups: individual and collective mesiodistal tooth diameters, dental arch length, as well as buccal and lingual dental arch widths in the canine and molar regions. To compare the two groups the Student's t-test with 95% confidence interval was used. **Results:** Statistically significant differences in both tooth diameters and transverse arch dimensions were found between the two groups. The crowded group was found to have a significantly smaller maxillary arch width and larger tooth size when compared with the uncrowded group. **Conclusion:** The results of this study suggest under equal conditions (a Class I skeletal relationship) tooth size has a greater role in developing dental crowding.

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1 Proffit, W.R., Fields, H.W. (2000) Contemporary Orthodontics, pp. 108-110. Cited 870 times. 3rd ed. St. Louis: Mosby; P

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2 Graber TM, Vanarsdall IR. Orthodontics Current Principles and Techniques. 3rd ed. St. Louis: Mosby; 2000.P. 395-397, 408.

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