

COMMENTARY

CORRELATION BETWEEN THE INDIVIDUAL AND THE COMBINED WIDTH OF THE SIX MAXILLARY ANTERIOR TEETH

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This study by Gonçalves and colleagues evaluates the correlation between the individual and combined widths of the maxillary anterior teeth. As suggested by the authors, the selection of denture teeth based on tooth width often presents a conundrum in terms of establishing esthetic proportions for successive widths of the maxillary anterior dentition. In this study, casts fabricated from poly vinyl siloxane impressions made of 69 undergraduate Brazilian dental students (17–33 years of age) were used to facilitate measurements.

Digital calipers were used to measure individual tooth widths of the maxillary anterior teeth, and the combined width of the maxillary anterior teeth was calculated by adding all the individual tooth widths. The authors added the widths of each anterior tooth and its antimer to establish the percentage of the anterior portion of the maxillary arch occupied by each tooth type. Relative to the anterior portion of the maxillary arch, the intra-arch tooth width proportions of the maxillary central incisors, lateral incisors, and canines represented 38, 29, and 33%, respectively.

This study did not account for variability in arch forms, which may range from tapering to square. Although the authors alluded to the significance of these proportions, in creating an esthetic result, the inclusion criteria for the study sample make no mention of any esthetic evaluation as a part of the sample selection process. Therefore, the esthetic import of this proportion remains unknown.

As a topic for future research, these proportions could be digitally manipulated to establish esthetic preferences among different groups, similar to the study conducted by Ward.¹ In conclusion, this study presents a useful statistic of maxillary anterior tooth width proportions, and these data may be used in conjunction with other parameters such as width : height ratios, in the rehabilitation of partially edentulous Brazilian patients.

REFERENCE

1. Ward DH. A study of dentists' preferred maxillary anterior tooth width proportions: comparing the recurring esthetic dental proportion to other mathematical and naturally occurring proportions. *J Esthet Restor Dent* 2007;19:324–37.

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