

COMMENTARY

GINGIVAL ZENITH POSITIONS AND LEVELS OF THE MAXILLARY ANTERIOR DENTITION

Edward P. Allen, DDS, PhD *

This article provides some very useful information regarding the gingival form in the esthetic zone. The authors rightfully point out the importance of gingival form in esthetic dentistry as well as the lack of strong evidence supporting the ideal form and relative levels of the gingival margin in the maxillary anterior segment. As the gingival margin provides one border of the tooth, its level and form contribute to the expression of tooth form, the most important feature in dental esthetics.

In a study of 576 patients, gingival exposure was found to range from approximately 13% of the subjects during a natural smile to 43% during a forced smile.¹ The authors found that nearly 90% of the patients expressed concern about esthetics and concluded that examination of gingival visibility should be evaluated in both natural and forced smiles.

This current study provides information on gingival form and level based on precise measurements in a defined population. The findings are confirmatory of previously held concepts for the gingival zenith at central incisors but offer a different view for the lateral incisor and canine, where the gingival zenith was found to be coincident with the vertical tooth midline for the canine and nearly so for the lateral incisor. Unfortunately, the small patient population renders these findings a trend, as the differences between the tooth groups were not significant.

The finding of the mean marginal gingival level of the lateral incisor 1 ± 0.5 mm coronal to the gingival margin of the adjacent teeth is consistent with most other reports as indicated by the authors. The range of 0 to 1.8 mm is compatible with the greater range of tooth width seen in lateral incisors. This finding has relevance in esthetic gingival contouring, where the surgeon has latitude in altering the lateral incisor margin in order to have the most positive impact on esthetics. Placement of the lateral incisor gingival margin coronal to the gingival margins of the adjacent teeth in a patient with a high lip line results in a gummy appearance at that site. Raising the lateral incisor gingival margin to a position level with the adjacent teeth eliminates that problem. However, tooth width must be considered so that a pleasing proportionality is also achieved.

The authors should be applauded for contributing objective information to the esthetic database, but they should also be encouraged to expand the population to reach statistical significance in their findings.

REFERENCE

1. Liebart MF, Fouque-Deruelle C, Santini A, et al. Smile line and periodontium visibility. *Perio* 2004;1:17–25.

*Director, Center for Advanced Dental Education, Dallas, TX

Copyright of Journal of Esthetic & Restorative Dentistry is the property of Blackwell Publishing Limited and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.