

Palatal rugae: a potential reference to determine key anterior maxilla dimensions and tooth positions.

Abstract

Palatal rugae have been suggested as a stable landmark and potential biometric guide for positioning anterior maxillary teeth. This study aimed to evaluate the use of palatal rugae as a biomarker by establishing mathematical correlations with anterior maxillary dental arch geometry and tooth positions. One hundred dental casts were obtained from fully dentate individuals with normal occlusal relationships. Thirteen reference points were analyzed. Significant correlations were found between measurements in the anterior dental segment and palatal rugae measurements. Those correlation coefficients were, however, low. Although some correlation values obtained were statistically significant, they are not likely to have significant clinical predictive value.