

題名:Correlation between craniofaciidental morphology and posed smiles

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摘要:INTRODUCTION: Smile evaluation and designing are important; recent emphasis on the soft tissues has been on par with that on the hard tissues in orthodontic diagnosis and treatment planning. This importance has not yet gained proper attention, and smile analysis is often ignored in clinical examinations. We attempted a comprehensive evaluation of smile characteristics with the following aims: (1) evaluation of perception differences, if any, between dental specialists and laypersons; and (2) quantification of smile characteristics with the smile arc, buccal corridor measurements, and a modified smile index (MSI). METHODS: The sixty subjects included in the study had an age range of 18 to 25 years (mean, 21 years) with equal numbers of men and women. Frontal posed smile photographs were taken of all subjects. The study had 2 parts. Analysis of perception differences between dental specialists and laypersons was performed with a visual analog scale. Quantification of smile characteristics was done with smile-arc evaluation for consonance or non-consonance, buccal corridor measurements, the MSI, and comparisons of the MSI with the facial index and the mandibular width-facial height index. RESULTS: There was no perception difference between the specialists and the laypersons on overall smile evaluation. Women had more consonant smile arcs than men, and there was high correlation between the right and left buccal corridor spaces in men and women. The MSI showed no correlation to the facial index, but there was a negative correlation of the MSI with the mandibular width-facial height index. CONCLUSIONS: Smile analysis should be an

important aspect of orthodontic diagnosis and treatment planning. Orthodontists should not disturb consonant smiles but create them with proper bracket positioning. The MSI, with negative correlation with the mandibular width-facial height index, warrants further evaluation with a larger sample to validate its clinical use and to develop a predictive approach of its relationship.