Inter-relationship between the upper lip and the maxillary positioning with upper incisors in adult patients

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Abstract

Introduction: Professional evaluations and lay person evaluations as well do not show a clear relationship between hard tissue and soft tissue profiles in orthodontic patients. However, there are concrete evidences that the orthodontist can change the facial profile of the patients. Aim: This research project aimed to measure the contribution of the bone structure of the maxilla and the upper incisors inclination to the upper lip profile. Methods: A sample of 147 adult patients, 58 male and 89 female, aged from 15 to 49 years, the most of them Caucasians, was retrospectively selected from the private practice of one of the authors. It was assumed that the esthetic facial profile depends of the hard tissues that support it besides its own features as thickness, strength and composition. The present research model was not set to control the intrinsic features of the soft tissue. To compose the Ricketts and Burstone esthetic lines, the main cephalometric variables were SNA and U1PP, when concomitantly considered. Results: The regression coefficients, although statistically significant, did not contributed expressively to explain the regard variables, the pre-defined esthetic lines. Furthermore, the results suggested a negative correlation between the maxillary position (SNA) and the anteroposterior inclination of the upper incisors (U1PP), possibly due to the compensatory action of the lips and the tongue. Conclusion: The results did not presented conclusive scientific evidences about the contribution of the hard tissues for the soft tissue facial profiles.

Keywords: Facial profile. Labial profile. Upper lip.