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Original Articles

## Lip Posture Following Debonding of Labial Appliances Based on Conventional Profile Photographs

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### Abstract

**Objective:** To assess changes in lip posture following debonding of labial appliances on the basis of a new soft tissue analysis performed by computerized tools with the use of conventional nonstandardized profile photographic pictures.

**Materials and Methods:** Profile photographs of 33 patients were taken just before and just after debonding of labial brackets. Pictures were examined twice through custom-made analysis in which Viewbox software was used. The validity of this new analysis was assessed in a preliminary study. A reference line was constructed between the center of the tragus and the outer canthus. The point where this elongated line intersected with the profile was coined nasion-modified and served as the vertex point for angles used to evaluate the prominence of the lips. The final position of the lines was determined when they were tangent to the appropriate landmarks. Analysis of variance (ANOVA) and *t*-tests for paired differences were used.

**Results:** The reproducibility of this photoanalysis was confirmed in the preliminary study, in that no significant differences were found between measurements ( $P < .05$ ). No statistically significant differences were noted in lip posture between pre-debonding and post-debonding pictures ( $P < .05$ ).

**Conclusions:** In keeping with the design of this study, soft tissue profile photoanalysis showed that the presence of bonded labial appliances had no effect on lip posture. (*Angle Orthod.* 2009;79; )

**Keywords:** [Photographs](#), [Profile](#), [Lip posture](#), [Analysis](#)

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