

## ABSTRACT

**Title: Esthetic perception of facial profile changes in patients treated with Jasper Jumper appliances**

**Introduction:** In this study, we sought to assess the perception of changes in soft-tissue profile after Jasper Jumper appliance treatment by comparing facial profile silhouettes before treatment, after treatment, and 2 years after treatment, as examined by orthodontists, general dentists, and laypersons. **Materials and methods:** The sample comprised 25 patients of both sexes (female 13, male 12) who were treated with the Jasper Jumper device with an initial mean age of 12.64 years, final mean age 14.0 years and mean long-term control age of 21.0 years, for a period of 20 months or mean of 1.83 years. Three lateral telerradiographs were obtained at different times: initial, after treatment with the Jasper Jumper device and 2 years later the removal of the appliance. The 75 resulting profile silhouettes were evaluated by 120 examiners divided into 3 groups: orthodontists, general dentists, and laypersons. The examiners were instructed to choose their preferred profile and note how much change they perceived across profiles using a visual analog scale. **Results:** All groups of examiners evaluated the silhouettes of the facial profiles similar in the three times: pre-treatment, post-treatment and long-term, not succeeding differences in results, demonstrating that the changes in profile silhouettes were appreciable, although the magnitude of the improvement was quite small, there was no difference. **Conclusion:** Although Jasper Jumper conceives some soft tissue changes, a magnitude of the changes cannot be perceived clinically relevant as statistically significant.